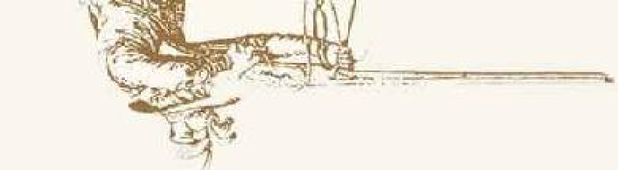
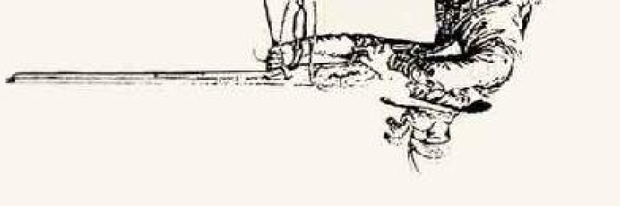
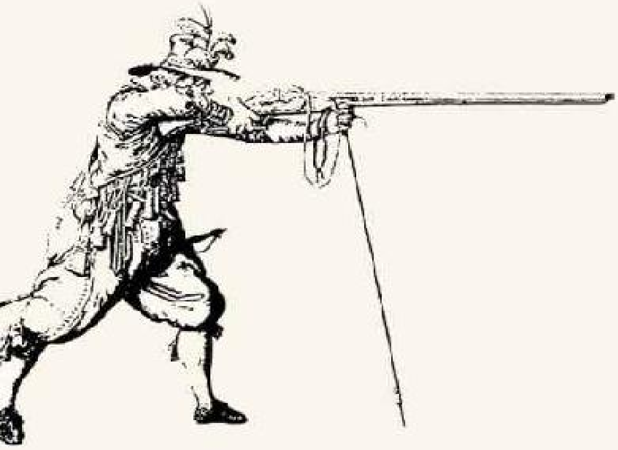



竞逐




William H. McNeill

公元 1000 年以来的技术、军事与社会

[美] 威廉·麦克尼尔 著　孙岳 译




富强




中信出版集团

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[illegible]

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[3] [illegible]
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[28] □□□□□□□□□□□□□1800□□□□□□□□□□□□□□□□□□□□□□□□□Assur□□□2000□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□——□□□□□□□□□□□□□□□□□□□□□M. T. Larsen, *The Old Assyrian City-State and Its Colonies*,Studies in Assyriology, vol. 4 (Copenhagen, 1976)□□A. Leo Oppenheim, “A New Look at the Structure of Mesopotamian Society,” *Journal of the Economic and Social History of the Orient 10* (1967): 1-16□

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998	32 500
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1078	125 000

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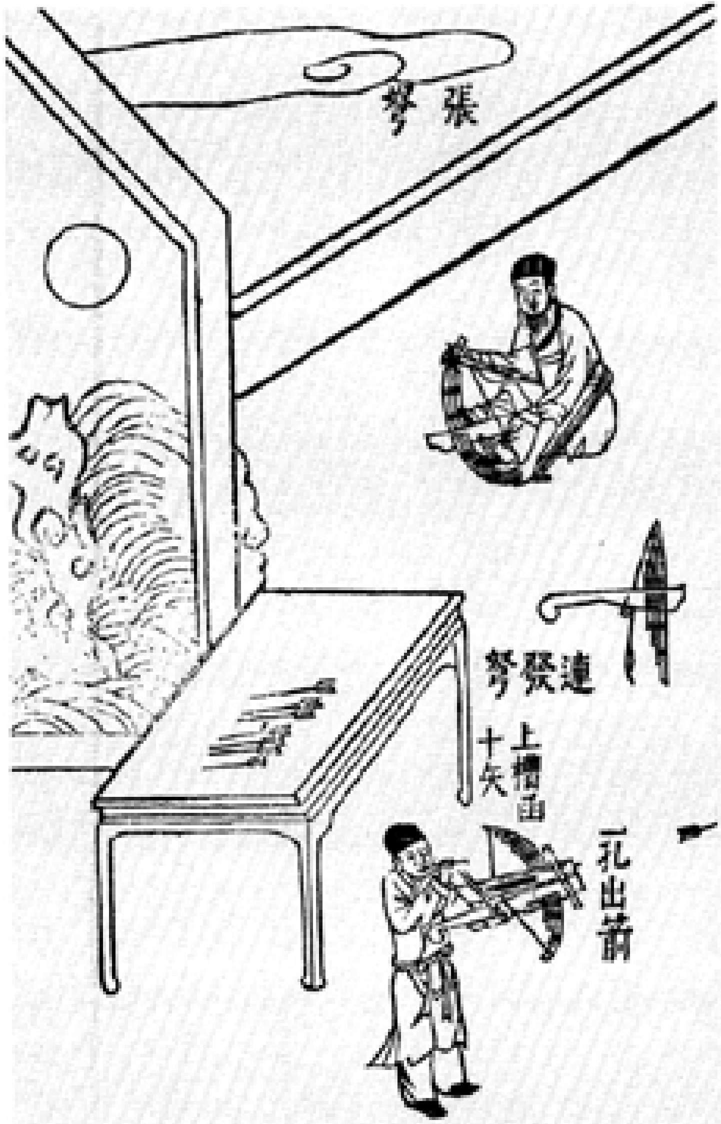
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[8] □□□□□□□□□□□□□□□

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[illegible] 15 [illegible] [9]

[illegible]

[illegible]

[illegible]

[illegible] 15 [illegible] 1480 [illegible] 1494 [illegible]

[illegible]

[illegible]

[illegible] 14 [illegible]

[illegible] 14 [illegible] “[illegible]” [illegible] 1301 [illegible] 11 [illegible] 1350 [illegible]

[illegible]1370[illegible][10][illegible]

[illegible]1326[illegible]1332[illegible][11]

[illegible]“[illegible]” [illegible]1[illegible]1453[illegible]

[illegible]1337—1453[illegible][12][illegible]Battle of Crécy[illegible]1346[illegible]

[illegible]——[illegible]——[illegible][13]

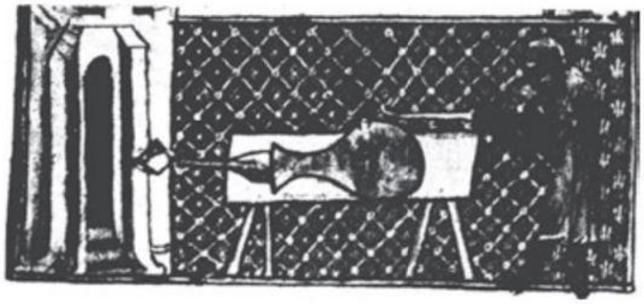
[illegible]1453[illegible]1461—1483[illegible]1477[illegible]1450—1478[illegible]25 000[illegible]80 000[illegible][14]

[illegible]1450—1453[illegible]100[illegible]

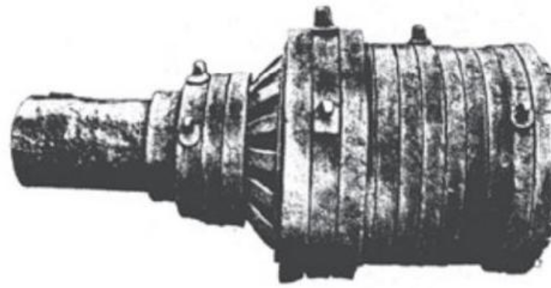
[illegible]1326[illegible][15]

[illegible]

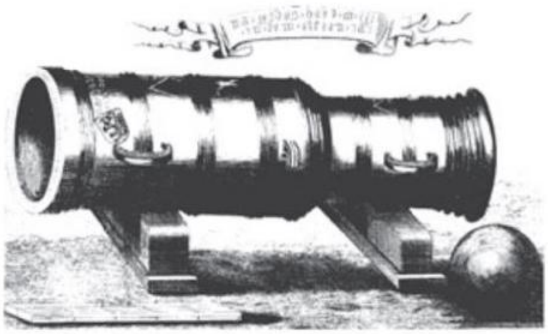
[illegible]“[illegible]”[illegible]bombards[illegible]



a



b



c



d

1326—1500[illegible]

[illegible]1326[illegible]a[illegible]b[illegible]c[illegible]15[illegible]d[illegible]

[illegible]a[illegible]Berhard Rathgen, *Das Geschütz im Mittelalter* (Berlin: VDI, 1928), Tafel 4, Abbildung 12. Miniature from the manuscript of Walter de Milimete, at Oxford, A.D. 1326[illegible]

（b）Ibid., Tafel 7, Abbildung 22. Stone throwing bombard, Vienna, made about A.D. 1425。
（c）A. Essenwein, *Quellen zur Geschichte der Feuerwaffen*(Leipzig: F. A. Brockhaus, 1877), vol. 2,pl. A.XXI-XXII. Brunswick bombard, cast in 1411 and recorded in a copperplate drawing in 1728。
（d）Ibid., pl. A.LXXII-LXXIII. Gun cast for Emperor Maximilian between 1500 and 1510,reproduced from Codex icon. 222, Münich Königlichen Hof- und Staatsbibliothek。

[illegible]1450[illegible]1543[illegible]12[illegible][16]

[illegible]1453—1543[illegible]17[illegible]20[illegible]17[illegible]60[illegible]Colbert[illegible][17][illegible]

[illegible]15[illegible]Fuggers[illegible][18][illegible]16[illegible]17[illegible]

[illegible]16[illegible]17[illegible]

[illegible]15[illegible]30[illegible][19][illegible]12~15[illegible][20][illegible]1453[illegible]

[illegible]

1465—1477[illegible][21][illegible]

[illegible][22][illegible]

[illegible]8[illegible]20~50[illegible]1465—1477[illegible]19[illegible]40[illegible][23]

1494[illegible]8[illegible]7[illegible][24]

1453[illegible]1465—1477[illegible]

[illegible][25][illegible]16[illegible]

[illegible]1494[illegible]·[illegible][26]

[illegible]1500[illegible][27]

[illegible][28]

[illegible]16[illegible]20[illegible]“[illegible]”[illegible]

[illegible]16[illegible]30[illegible]1516—1521[illegible]Charles V of Ghent[illegible]

[illegible]1525[illegible]

[illegible]1525[illegible]——[illegible]25[illegible]——[illegible]16[illegible]60[illegible]1565[illegible]

[illegible]1499—1559[illegible]

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[illegible]16[illegible]1525[illegible]

[illegible]

[illegible]

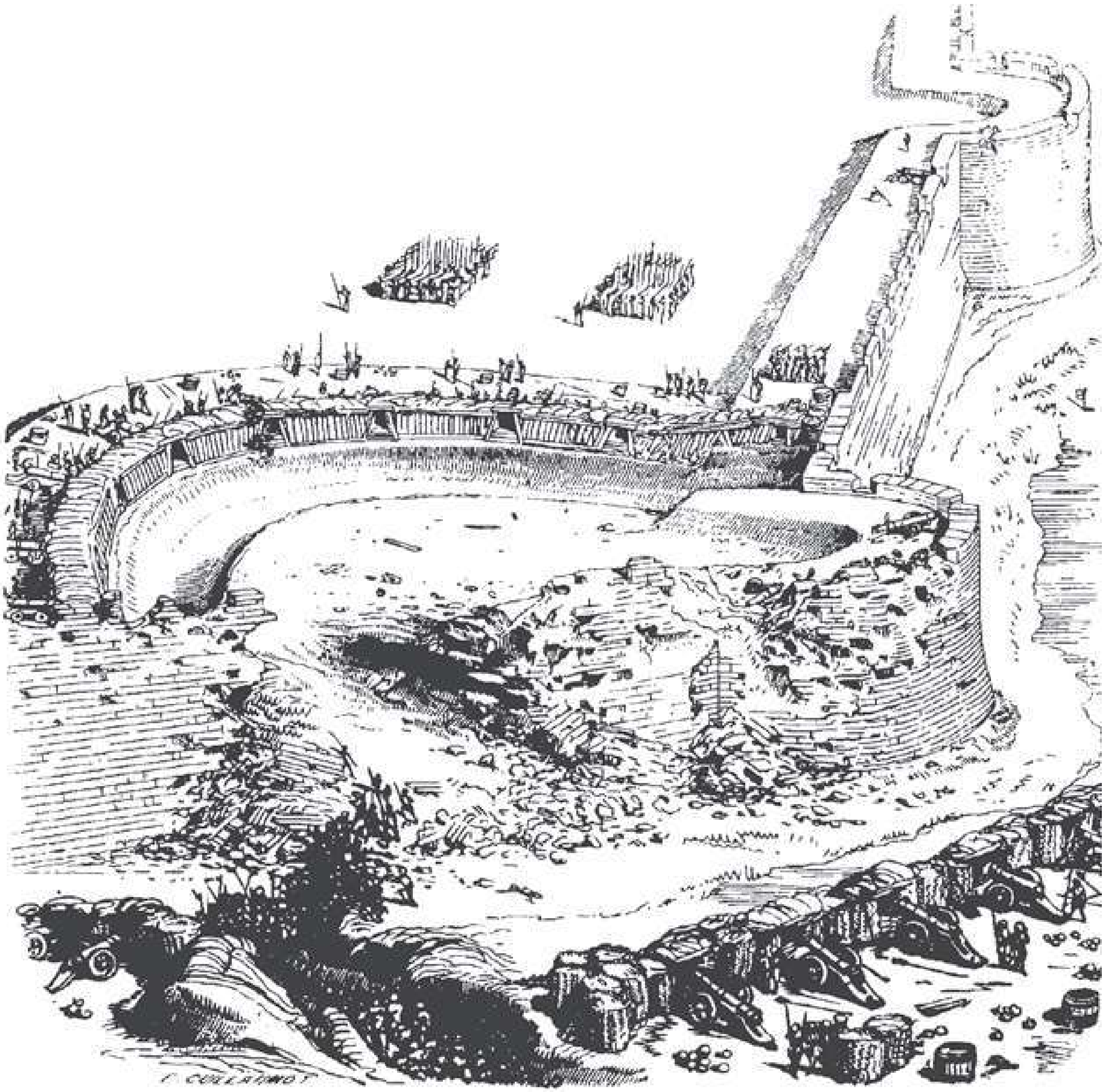
16

1526

1480 1453 1368—

1644 Safavid empire

Shah Abbas 1587—1629

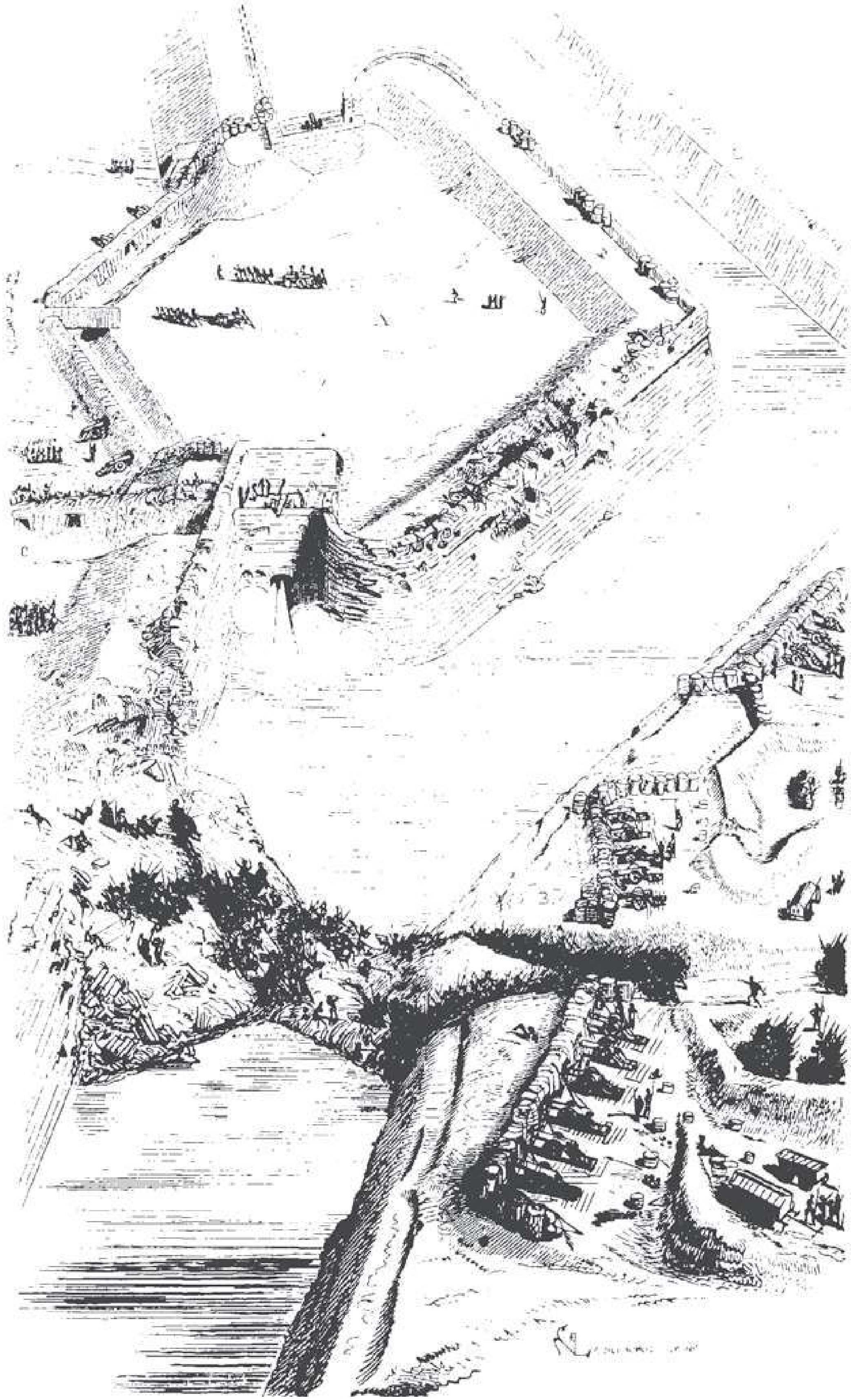


[illegible]

[illegible]19[illegible]·[illegible]·[illegible]-[illegible]-[illegible]E. Viollet-le-Duc[illegible]

[illegible]E. Viollet-le-Duc, *Dictionnaire raisonné de l’architecture française du IXe au XVIe siècle*(Paris, 1858),vol. 1:420 (fig. 57), 452 (fig. 75), and 441 (fig.72)[illegible]





[illegible]——[illegible]Babur[illegible]1526—1530[illegible]——[illegible]——[illegible]Akbar[illegible]1566—1605[illegible]——[illegible]

[illegible]1593—1606[illegible][29][illegible]Livonian war[illegible]1557—1582[illegible][30][illegible]17[illegible]18[illegible]19[illegible]

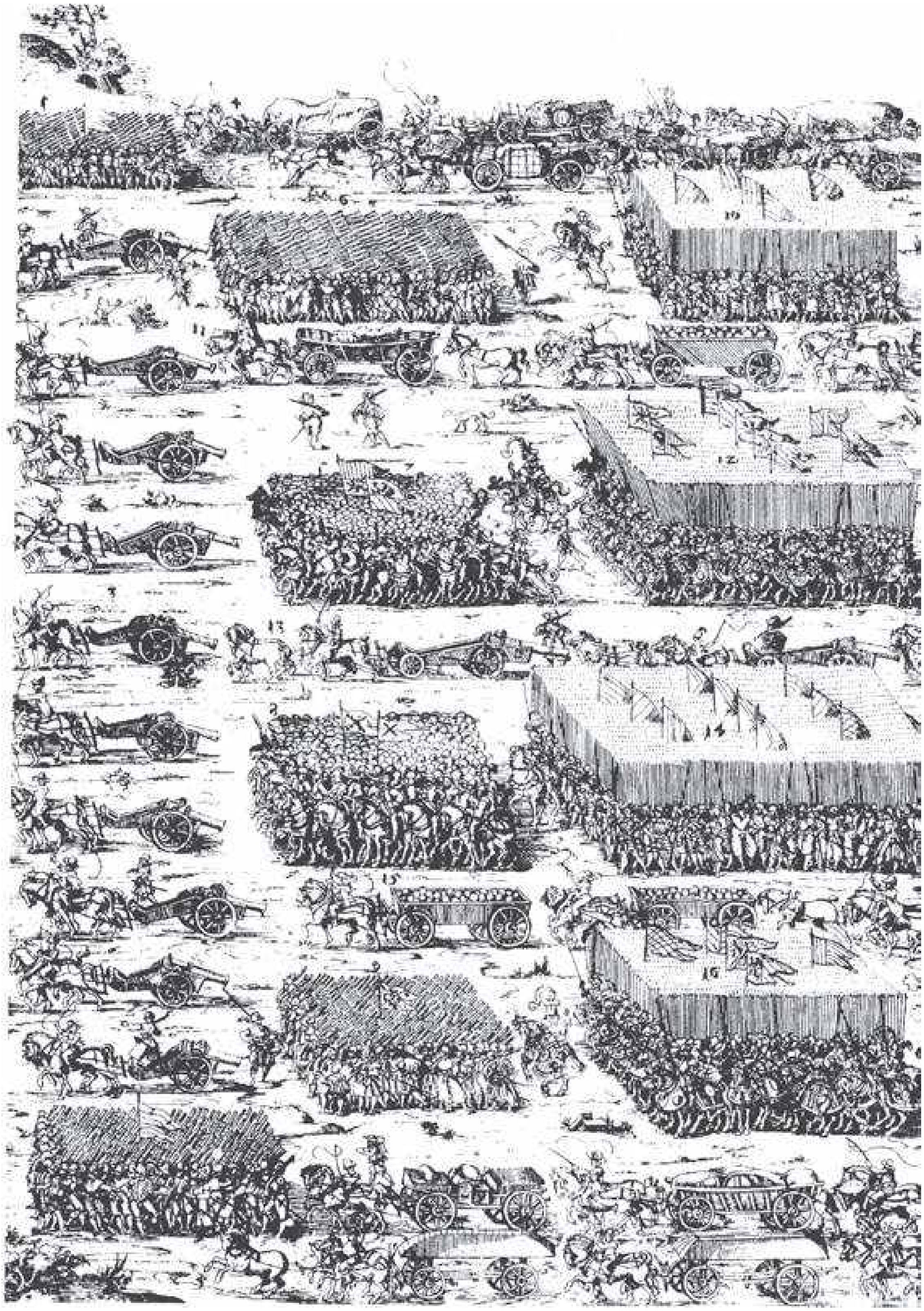
[illegible]1644—1912[illegible]19[illegible]

15[illegible]16[illegible]

[illegible]——[illegible]——[illegible]

[illegible]

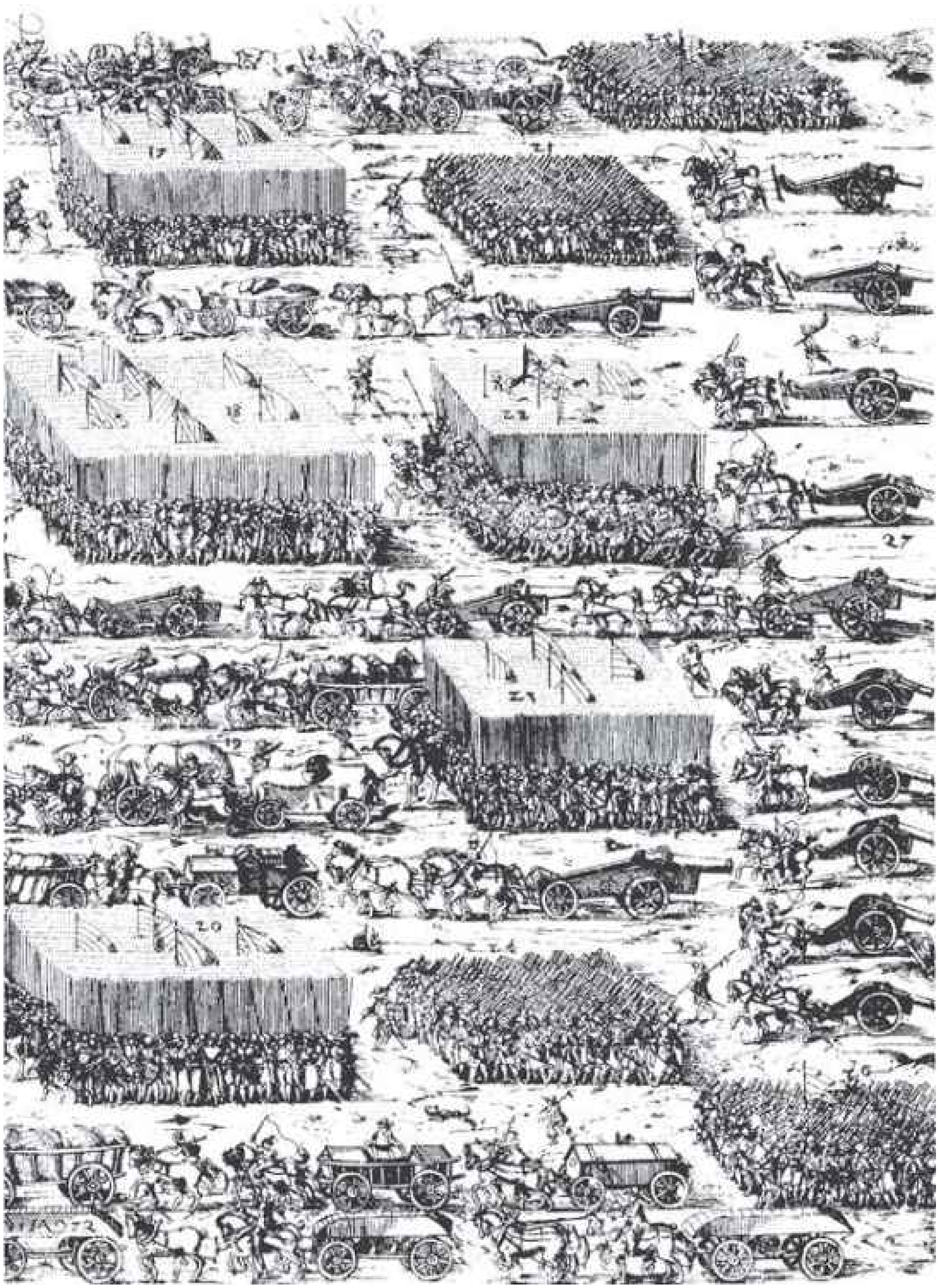
[illegible]13[illegible]



[illegible]16[illegible]

[illegible]16[illegible]

[illegible]Leonhardt Fronsperger, *Von Wagenburgs und die Veldlager*(Frankfurt am Main, 1573; facsimile reproduction, Stuttgart, Verlag Wilh. C. Rübsamen, 1968)[illegible]



[illegible]15[illegible]20[illegible]

[illegible]

[illegible]1465—1477[illegible]1514[illegible]70[illegible]·[illegible]Sir John Hawkins[illegible]“[illegible]” [illegible]15[illegible]

[illegible]1492[illegible]1497[illegible]Diu[illegible]1509[illegible]200[illegible]

[illegible]1581[illegible][31][illegible]1556—1598

[illegible]1588[illegible]

[illegible]17[illegible]·[illegible][32]

[illegible]

16[illegible]1588[illegible]40[illegible]28[illegible][33]

[illegible]“[illegible]” [illegible]Spanish Main[illegible]

[illegible]·[illegible]Sir Francis Drake[illegible]1577—1580[illegible][34]

[illegible]Manuel[illegible]1495—1521[illegible]1558—1603[illegible]

[illegible][35]

[illegible]1570[illegible]

[illegible]1568—1603[illegible][36][illegible]

[illegible]

[illegible]

[illegible]1497[illegible]

[illegible]3[illegible]19[illegible]17[illegible]

[illegible]

[illegible]

[illegible]——[illegible]——[illegible]

[illegible][37][illegible]17[illegible]

[illegible]1568—1609[illegible]1576[illegible]“[illegible]” [illegible]15[illegible]

[illegible]1576[illegible][38]

[illegible]

[illegible]——[illegible]

[illegible]1576[illegible]Pacification of Ghent[illegible]—[illegible]1577[illegible]1583[illegible]1580—1581[illegible][39]

[illegible]17[illegible]

[illegible]16[illegible]20[illegible]1567—1609[illegible]16[illegible]“[illegible]” [illegible][40]

[illegible]

[illegible]——[illegible]

[illegible]16[illegible]17[illegible]

[illegible]“[illegible]”[illegible]

[illegible]16[illegible]50[illegible]1520—1525[illegible]1568[illegible]

[illegible]1556—1577[illegible]1557[illegible]1560[illegible]1575[illegible]1596[illegible]

[illegible]3-1 [illegible]

年代	军费（百万达克特 / 年）
1556 年以前	少于 2
16 世纪 60 年代	4.5
16 世纪 70 年代	8
16 世纪 90 年代	13

[illegible][41]

[illegible]3-2 [illegible]

年份	欠款（百万达克特 / 年）
1559	1.04
1575	2.17
1607	4.76

[illegible][42]

[illegible][43]

[illegible][44]

[illegible]

“” “”

1500 [45]

14 18 18 14

[46]

1492

[illegible]

[illegible]

[illegible]

[illegible]——[illegible]——[illegible]

[illegible]——[illegible]

[illegible]

[illegible]16[illegible]

[illegible]19[illegible]·[illegible]20[illegible]—[illegible]

[illegible]19[illegible]80[illegible]

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[19] 1[illegible]2.54[illegible]——[illegible]

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[34] □□□□□87□□□□□□□□□□□□□4700%□

[35] 1590□□□□□□□□□□□□□□□“□□□□□□□□□□□□□□□□5□□□□1585□□□□□□□□□□□□□□□□□20□□□□□□”□□Kenneth R. Andrews, *Elizabethan Privateering, 1585–1603* (Cambridge, 1964), p.22□□□□□□□□□□30□□□□□□□□□□□□□□□□□□□□

[36] □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□Andrews, *Elizabethan Privateering*□

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3-3 □□□□□□□□□□□

年代	西班牙	法国
17 世纪 30 年代	300 000 人	150 000 人
17 世纪 50 年代	100 000 人	100 000 人
17 世纪 70 年代	70 000 人	120 000 人
18 世纪	50 000 人	400 000 人

□□□17□□30□□□□5□□□□□□18□□□10□□□□□□□□□□□□□□17□□30□□□4.5□□□18□□□10□□□□□□□□17□□30□□□3.5□□□18□□□17□□□□□□□□□□□□Parker□□□□□18□□□□□□10□□30□□□□□□□

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[46] □□□Jean Le jeune, *La formation du capitalism moderne dans la principauté de Liège au XVI siècle* (Liège, 1939), p. 181; Claude Gaier, *Four Centuries of Liège Gunmaking* (London, 1977), pp. 29-31□

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[illegible]1600—1750[illegible]

1300—1600[illegible]“[illegible]—[illegible]” [illegible]17[illegible]

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[illegible]—[illegible]-[illegible]Peace of Cateau-Cambrésis[illegible]1559[illegible]1627—1628[illegible]

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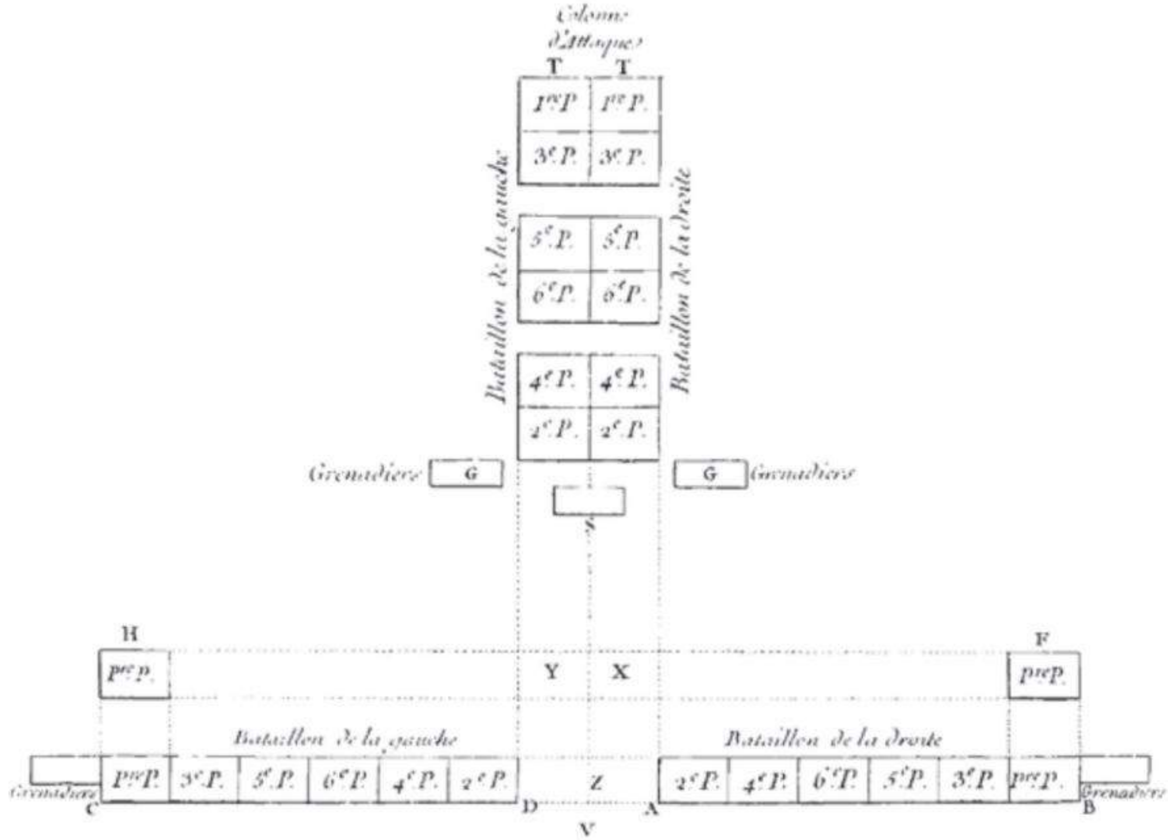
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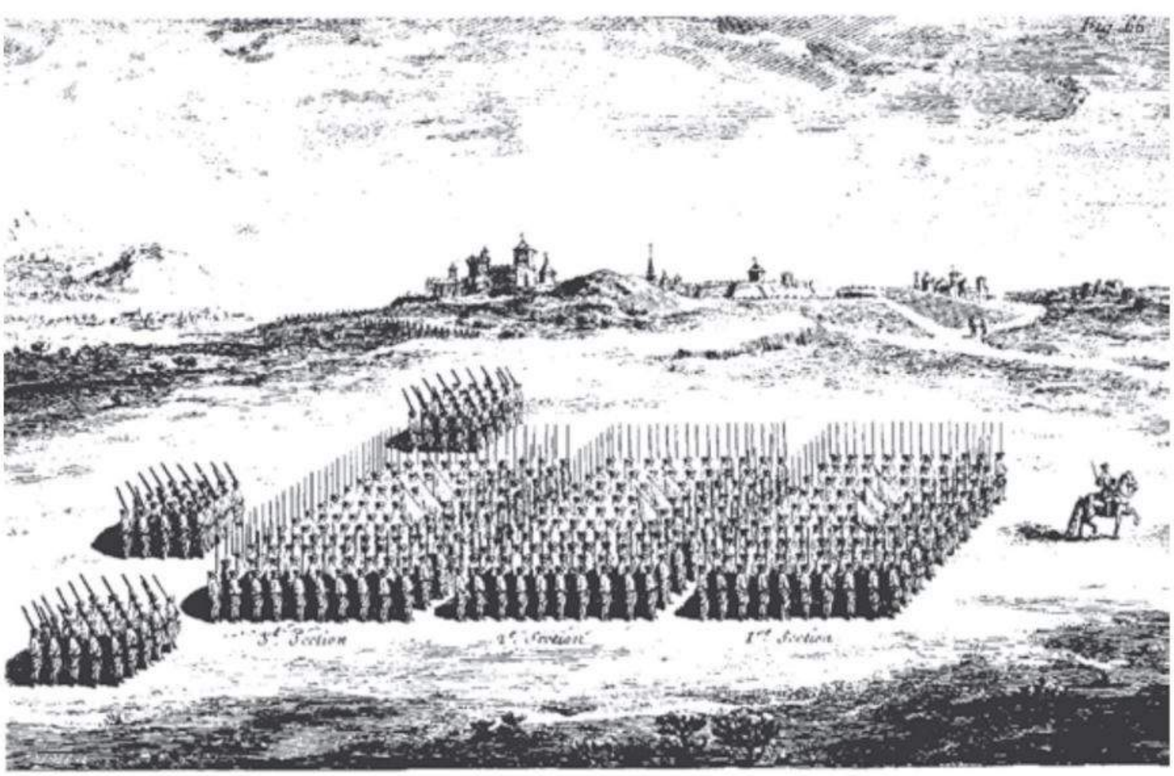


Fig. 66
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Denis Diderot, *A Diderot Pictorial Encyclopedia of Trades and Industry,* edited by Charles Coulston Gillispie (New York: Dover Publications, 1959; vol. 1, pl. 67) 1763

Maurice of Nassau Prince of Orange 1567—1625 1585 captain-general Vegetius Aelian [9]

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susceptibilities

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[illegible]1607[illegible][13]

[illegible]1619[illegible]·[illegible]——[illegible]——[illegible]1643[illegible]

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11 举枪



12 点火



13 放下枪，靠住叉架



14 取下火绳



15 左指再握枪



16 吹火绳



24 将火药从枪口倒入



25 取出通条

[illegible]

[illegible]43[illegible]8[illegible]

Wapenhandelinghe van Roers, Musquetten ende Spiessen, Achtervolgende de Ordre van Syn Excellentie Maurits. Prince van Orangie . . . Figuirlyck rutgebeelt door Jacob de Gheyn(The Hague, 1607; facsimile edition, New York: McGraw Hill, 1971)

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[illegible][24] [illegible] 1690 [illegible]“[illegible]” [illegible]Brown Bess[illegible] 1840 [illegible][25] [illegible]

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[illegible]

[illegible]17[illegible]19[illegible]

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[1] [illegible]Battle of Marignano[illegible]1515[illegible]Charles Oman, A *History of the Art of War in the Middle Ages* (London, 1898), 2:279[illegible]1476—1477[illegible]“[illegible]” [illegible]

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[illegible]Maurice de Saxe, *Reveries on the Art of War,* trans. Thomas R. Phillips (Harrisburg,Pa., 1944), pp. 30-31[illegible]“[illegible]……[illegible]……

“[illegible]”

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[13] Jacob de Gheyn, *Wapenhandelinghe van Roers, Musquetten ende Spiessen, Achtervolgende de Ordre van Syn Excellentie Maurits, Prince van Orangie* (The Hague, 1607). [illegible]New York[illegible]1971[illegible]J.B. Kist[illegible]Kist[illegible]1592[illegible]800[illegible]550[illegible]·[illegible]Johann Jacob Wallhausen,*Kriegskunst zu Fuss* (1614)[illegible]

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[24] 1710[illegible]1615[illegible]33%[illegible]50%[illegible]Chandler, *The Art of War* , pp. 76-79[illegible]

[25] [illegible]100[illegible]1730—1830[illegible]Board of Ordnance[illegible]Howard L. Blackmore,*British Military Firearms, 1670-1850* (London, 1961)[illegible]

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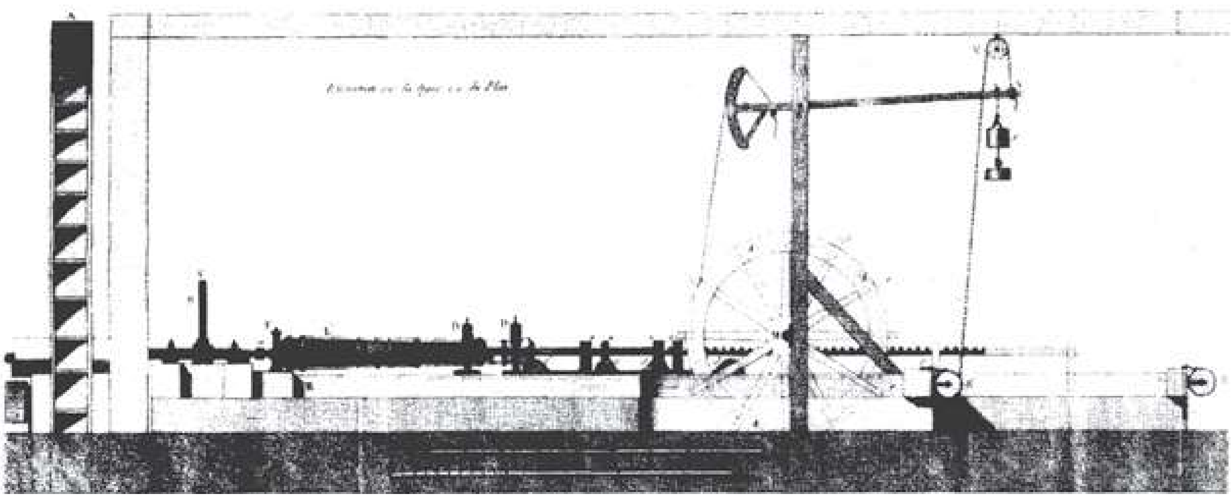
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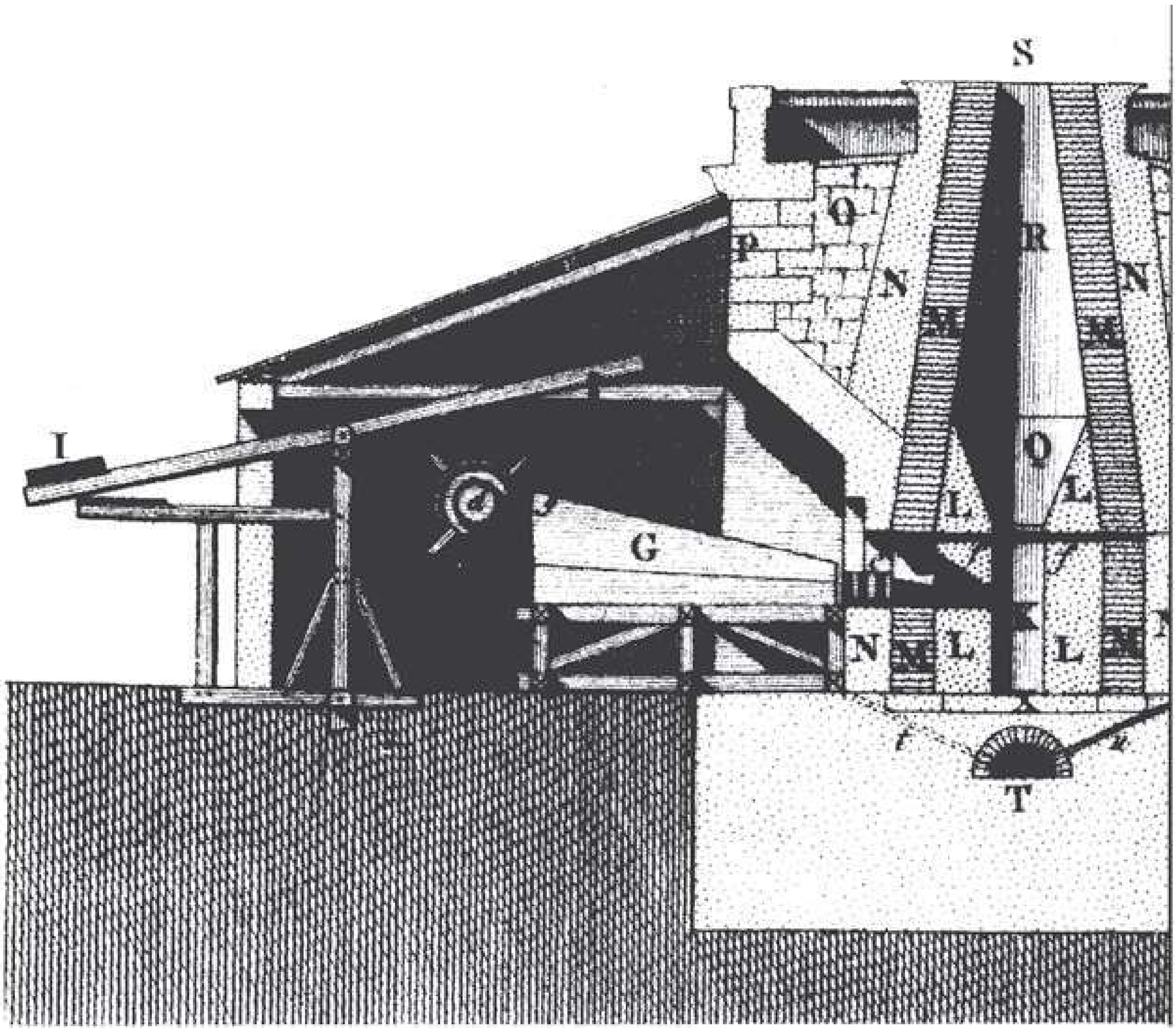
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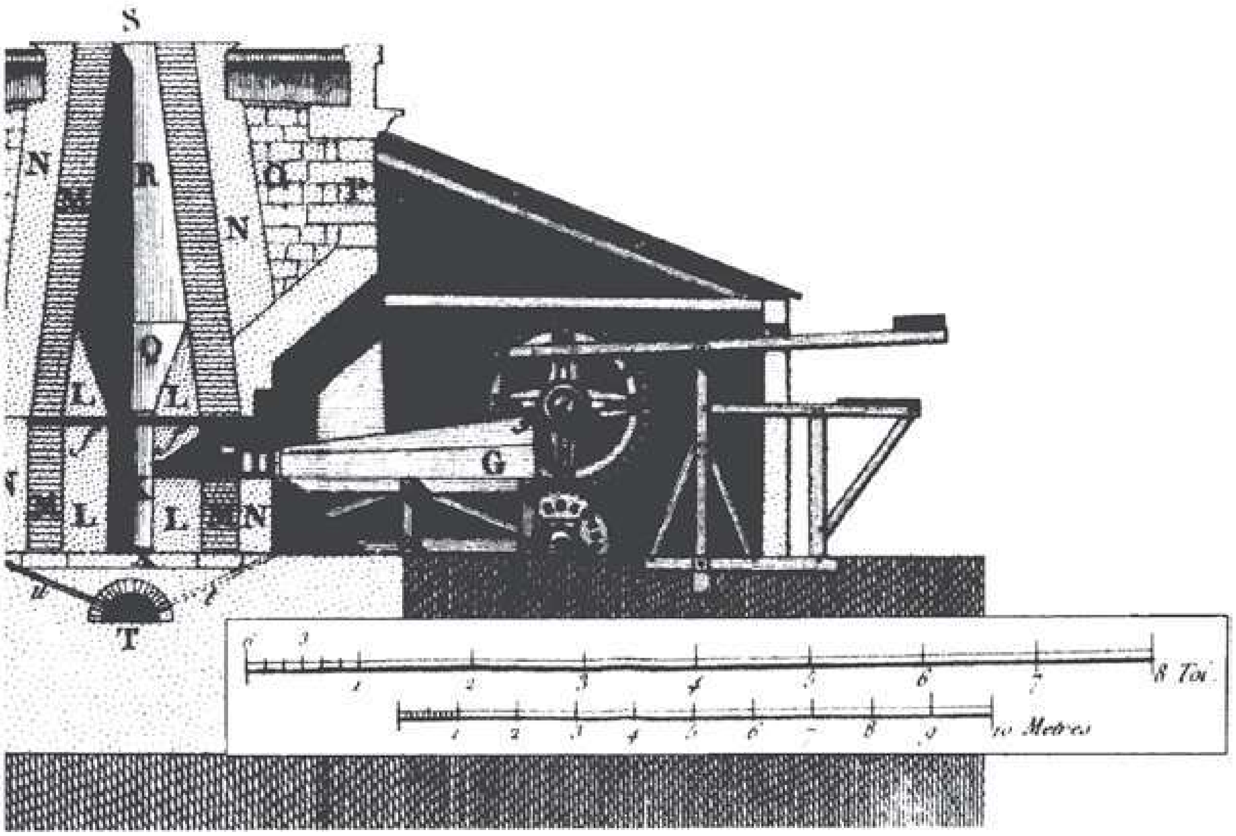
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[illegible]Le Creusot[illegible]Indret[illegible]·[illegible]William Wilkinson[illegible]·[illegible]·[illegible]·[illegible]Baron François Ignace de Wendel[illegible]4 000[illegible]333[illegible]

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[illegible]-[illegible]Le Creusot-Indret plan[illegible]·[illegible]19[illegible]·[illegible]19[illegible]·[illegible]1885[illegible]

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[illegible]1692[illegible]15[illegible]Battle of La Hogue[illegible]

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[illegible]1763[illegible]18[illegible]——[illegible]carronades[illegible][47]

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[illegible]1763—1778[illegible]1783[illegible]

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18[illegible]1775[illegible]1779[illegible]1[illegible]4[illegible][58]

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18□□80□□□1789□5□□□——□□□□□□□——□□□1789—1815□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□18□□□

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[2] 1730□□□□□□□□□□□□Mahmud I□□□-□□□□·□□□□□□□Claude-Alexandre, comte de Bonneval□1675—1747□□□□□□□□□□□□□□□□□□□□□□□□·□□□Achmet Pasha□□□□□□□□□□□□□Rumelia□□1736—1739□□□1738□□□1770□□□□□□□□□□□□□□□□□□□□□□□□□□·□·□□□□□Baron François de Tott□1733—1793□□□1774□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□·□□□□□□□□□□·□□□1776□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□·□□□□□□□□□□□Albert Vandal, *Lepacha Bonneval* (Paris, 1885)□□□□·□□□□□□□□□□□□□□□□*Mémoires sur les Turcs et les Tartares* (Amsterdam, 1784)□

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[illegible]

[illegible]1789—1840[illegible]

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[illegible]18[illegible][1][illegible]18[illegible]1750[illegible]57.5[illegible]1801[illegible]90[illegible]1789[illegible]60[illegible]~70[illegible]10[illegible][2]

[illegible][3][illegible]1697[illegible]26 481[illegible]1789[illegible]49 948[illegible]20%[illegible][4]

[illegible]1780[illegible]1789[illegible][5]

[illegible]

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[illegible]1787[illegible][9][illegible]

1789[illegible]7[illegible]14[illegible]7 000[illegible][10][illegible]

[illegible]

[illegible][11][illegible]——[illegible]——[illegible]

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[illegible]1789[illegible]10[illegible]5[illegible]6[illegible]1789[illegible]

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1791[illegible]6[illegible]1791[illegible]1792[illegible][13]

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Law of the Maximum

1793 7 65 1789 1700 30% [28]

1793 1794 1795—1799

1797 1792 9 40 [29]

[illegible]1763[illegible]Battle of Hondschoote[illegible]1793[illegible]9[illegible]Battle of Wattignies[illegible]1793[illegible]10[illegible]

[illegible]“[illegible]” [illegible]·[illegible]Lazare Carnot[illegible][30]

[illegible][31][illegible]

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[illegible][32]

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[illegible]1841[illegible]“[illegible]”[illegible]1812[illegible]18[illegible]20[illegible]

[illegible]“[illegible]”[illegible]1789[illegible]2 500[illegible]1810[illegible]4 400[illegible]1800—1812[illegible]130[illegible]1812[illegible]1812[illegible][34]

[illegible]

[illegible]1808[illegible]·[illegible]42 000[illegible]1813[illegible]Befreiungskrieg[illegible]

[illegible]1810[illegible]1797[illegible]1800[illegible]1805[illegible]1809[illegible]1806[illegible]1795—1801[illegible]1801—1825[illegible][35]

[illegible]1810[illegible]Klemens von Metternich[illegible]Francis II[illegible]

[illegible]1810[illegible]

[illegible]1806[illegible]1789—1800[illegible]1811[illegible]40%[illegible][36][illegible][37][illegible][38]

[illegible] 1793 [illegible]

[illegible] 1808—1812 [illegible] 1808—1812 [illegible] 1810 [illegible] 1811 [illegible] Torres Vedras [illegible] 250 000 [illegible]

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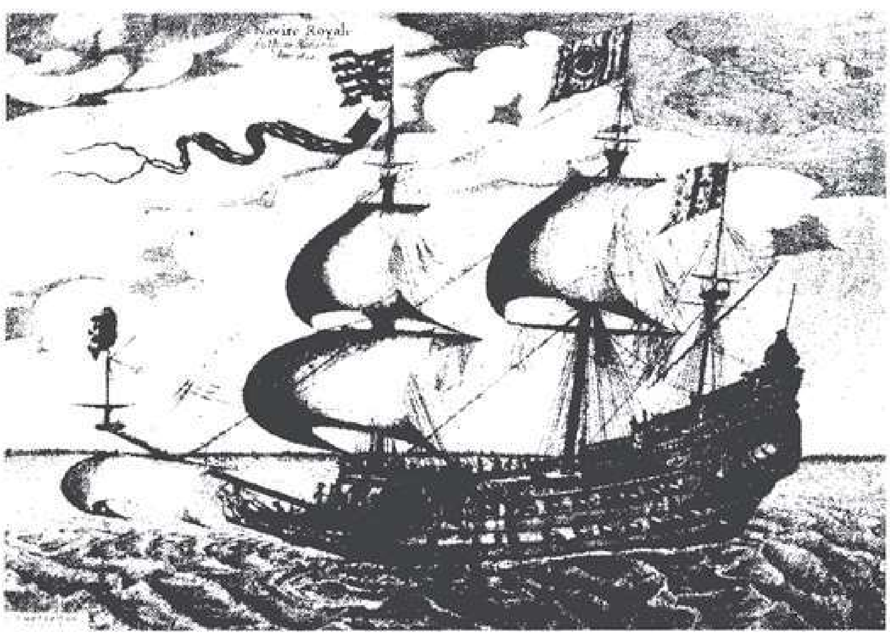
1812 [illegible] 1807 [illegible] 1808 [illegible] [40]

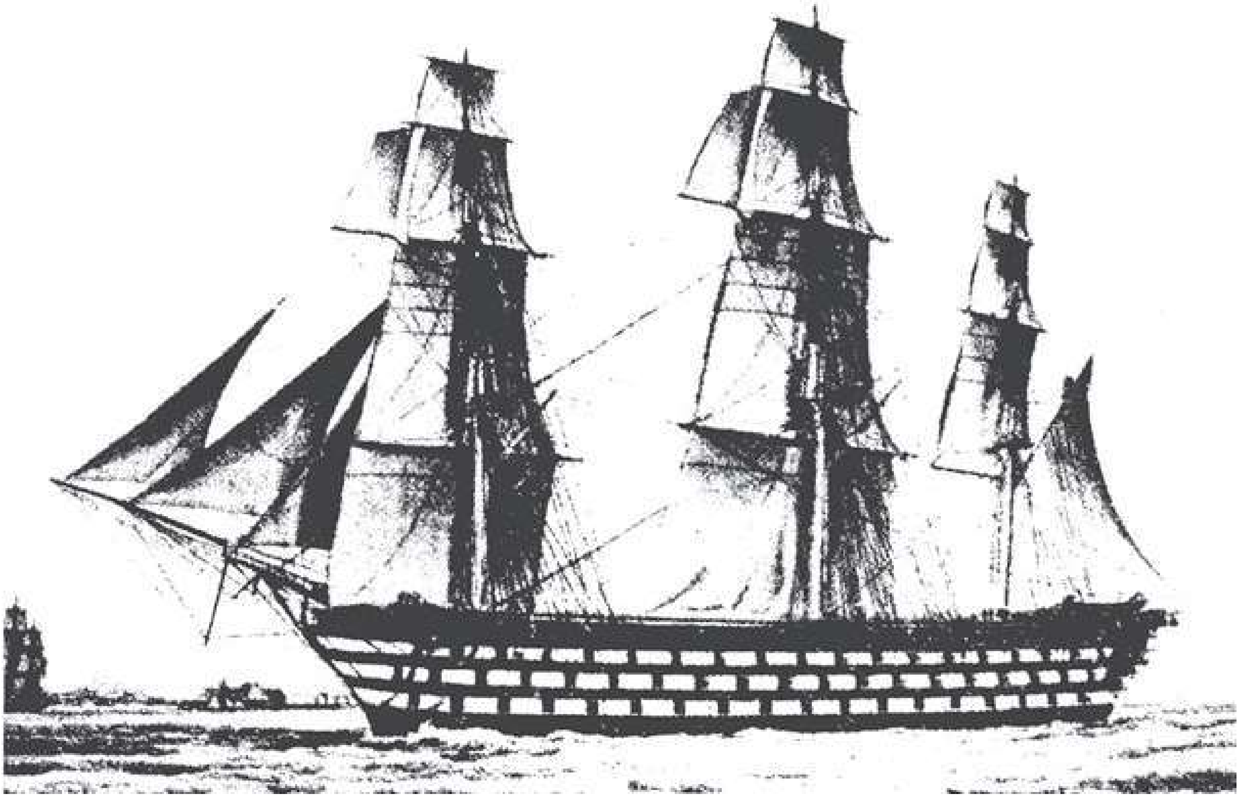
[illegible] [41]

[illegible]

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[illegible]

[illegible]17[illegible]19[illegible]1626[illegible]1847[illegible]
[illegible]
[illegible]E. Van Konijnenburg, *Shipbuilding from Its Beginnings* (Brussels: Permanent International Association of Congresses of Navigation, n.d.), figs. 146, 173[illegible]

[illegible]·[illegible]John Wilkes[illegible]1725—1797[illegible]1789—1794[illegible]

[illegible]——[illegible][44][illegible]

[illegible]

[illegible]1814[illegible]50[illegible][45][illegible]4%[illegible]18[illegible]1794—1795[illegible]

[illegible]1717[illegible]1718[illegible]1775—1783[illegible]1812—1814[illegible][46][illegible]2 000~3 000[illegible]1793[illegible]1[illegible]1650[illegible]10[illegible]

[illegible]“[illegible]” [illegible]high farming[illegible]1795[illegible]“[illegible]” [illegible]Speenhamland[illegible][47][illegible]1788—1789[illegible]1795[illegible]

[illegible] 18 [illegible] 1797 [illegible] 1799 [illegible] 1806 [illegible]

[illegible] [48] [illegible] [49] [illegible] 6 580 [illegible] [50] [illegible] 50 [illegible] [51]

[illegible] [52]

[illegible] 1793—1815 [illegible] 1816—1820 [illegible] [53] [illegible]

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[illegible]19[illegible]15[illegible]19[illegible]

[illegible][55][illegible]1791[illegible]1 450[illegible]1811[illegible]1 810[illegible][56]

[illegible]

[illegible]1792—1815[illegible]130~150[illegible][57][illegible]19[illegible]19[illegible][58]

[illegible]1792—1815[illegible]1914[illegible]

[illegible]18[illegible]1789—1815[illegible]

[illegible] 1815 [illegible] 19 [illegible]

1792—1812 [illegible] 1813 [illegible]

[illegible]1815—1840[illegible]

[illegible]1812[illegible]

[illegible]1806[illegible]·[illegible]·[illegible]Gerhard Johann David von Scharnhorst[illegible]1755—1813[illegible]·[illegible]·[illegible]·[illegible]

[illegible]1813[illegible]1808[illegible]

> [illegible][59]

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[61] 1790[illegible]1791[illegible][62][illegible]

[illegible]1819[illegible]1808[illegible]1808[illegible]

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Gneisenau[illegible]1760—1831[illegible]

[illegible]1815[illegible]19[illegible]·[illegible]·[illegible]Helmut von Moltke[illegible]1800—1891[illegible]1866[illegible]

[illegible]1813—1814[illegible][63][illegible]Landwehr[illegible]1813[illegible]

[illegible]1813—1814[illegible]1819[illegible][64]

[illegible]

1840

1792—1815 1793 “ ” “Congreve” rockets [65]

1815 “ ” 18 90 1815 1792—1815 60 [66]

1815 1793—1795 1813—1814 1810

1815 1830 19 40

[illegible]
[67][illegible]19[illegible]

[illegible]——[illegible]19[illegible]40[illegible]

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[19] 1794□6□□□□□□□□□□□□□□□□□□□3□□□□□□□□□□□S. J. Watson, *Carnot* (London, 1954), p. 88□□□□□□□□□□Alan Forrest, *The Trench Revolution and the Poor* (Oxford, 1981), pp. 138-167□

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[32] 20□□

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[illegible]1840—1884[illegible]

19[illegible]40[illegible]10[illegible]1854—1856[illegible]19[illegible]80[illegible]30[illegible]

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[illegible]

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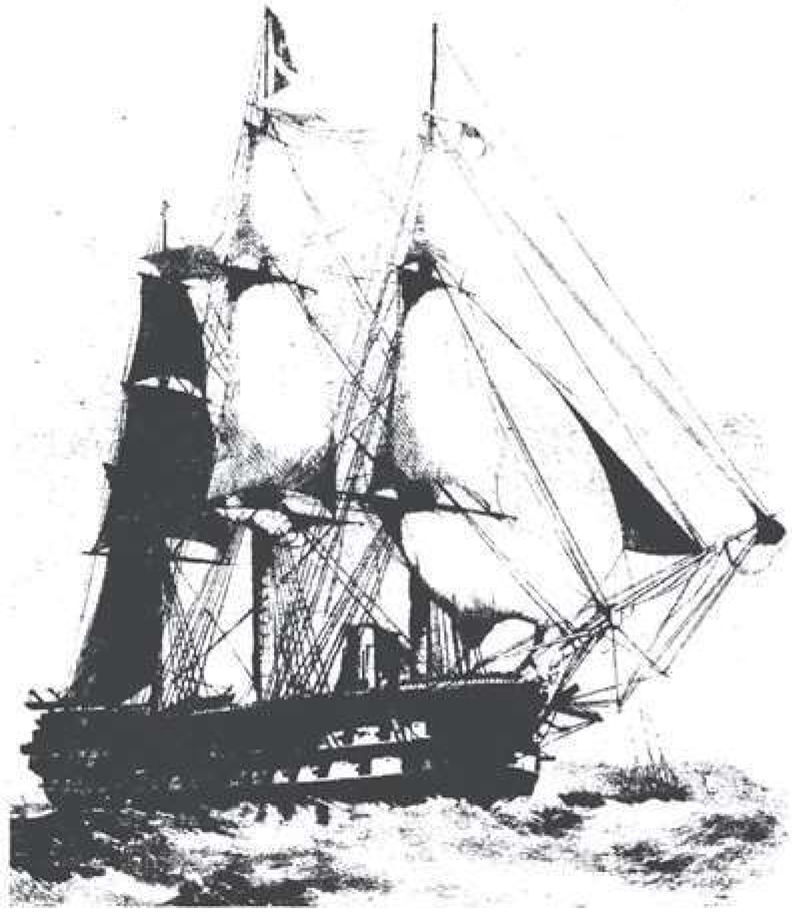
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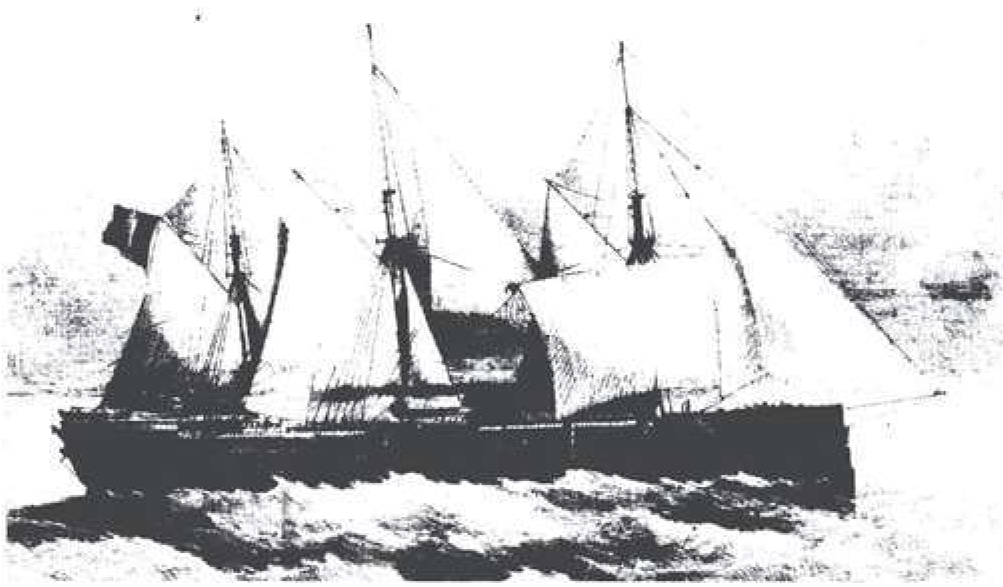
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[illegible]12.5[illegible]5.2[illegible][10]





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[illegible]1812[illegible]

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1854—1856[illegible]“[illegible]”[illegible]

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1858[illegible]1861—1888[illegible]17[illegible]1862[illegible]·[illegible]·[illegible]

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1864[illegible]1815[illegible]1865[illegible]4[illegible]Düppel[illegible]

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[illegible]1947[illegible]19[illegible][45][illegible]——[illegible]1889[illegible]

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年份	陆军与枪械	海军	合计
1838	8.0	4.8	12.8
1839	8.2	4.4	12.6
1840	8.5	5.3	13.8
1841	8.5	3.9	12.3
1842	8.2	6.2	14.4
1843	8.2	6.2	14.4

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[illegible]1850[illegible]100[illegible]

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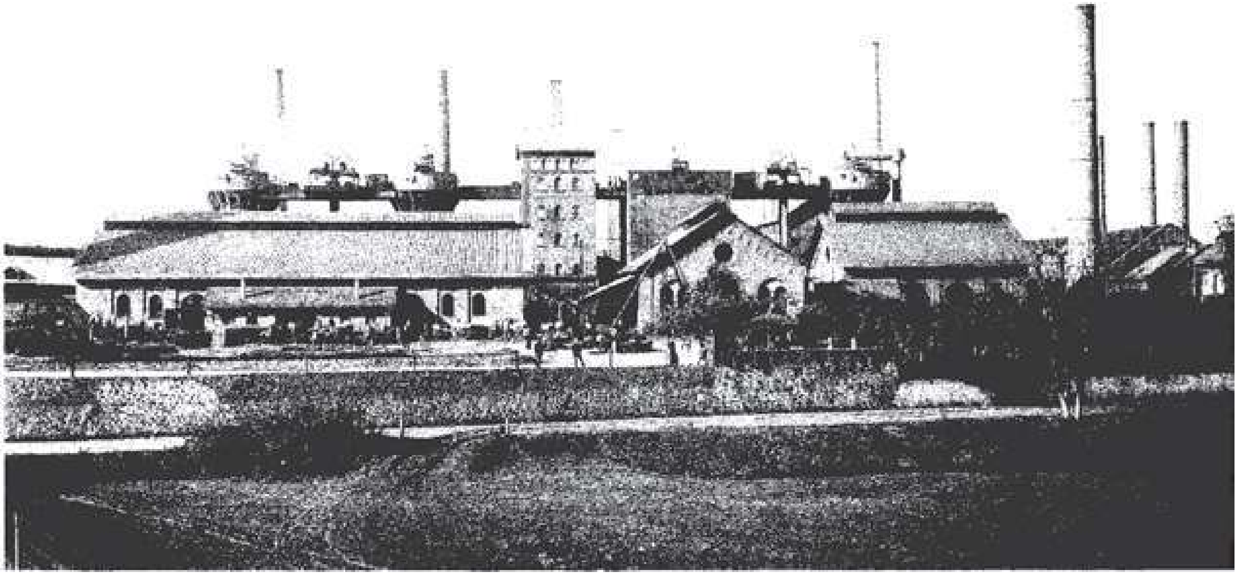
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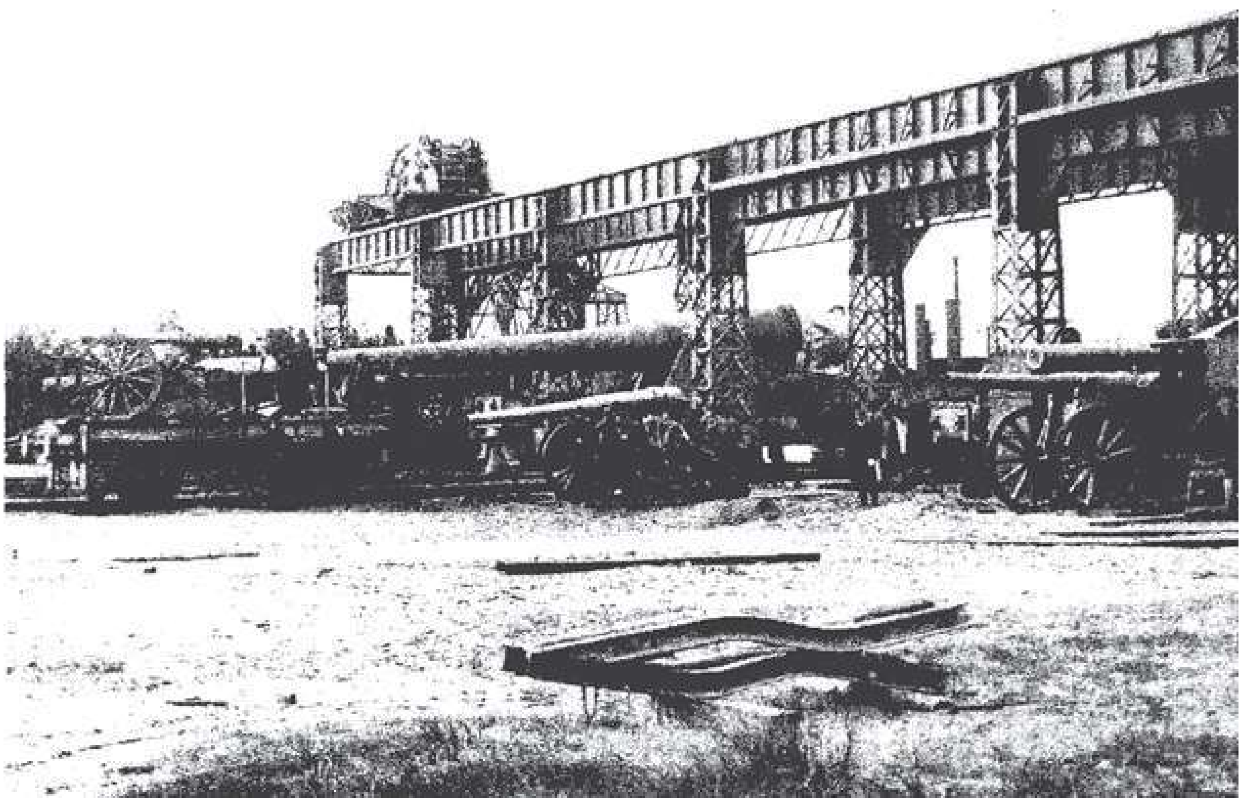
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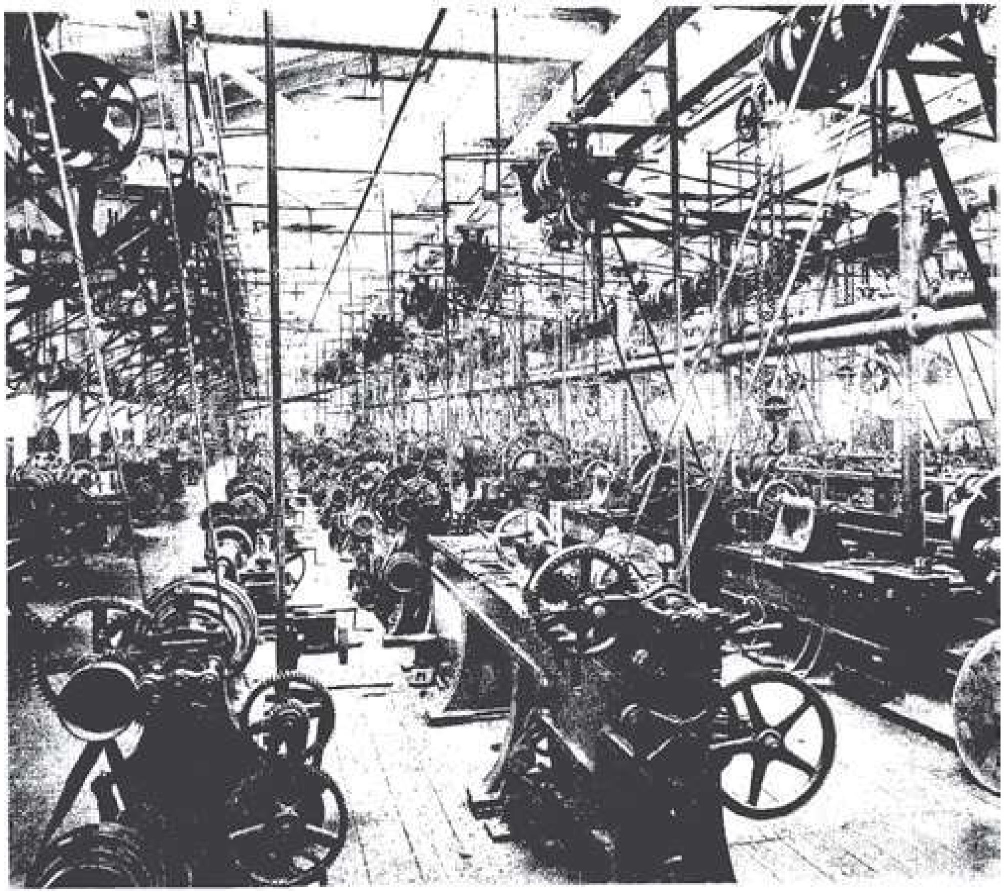
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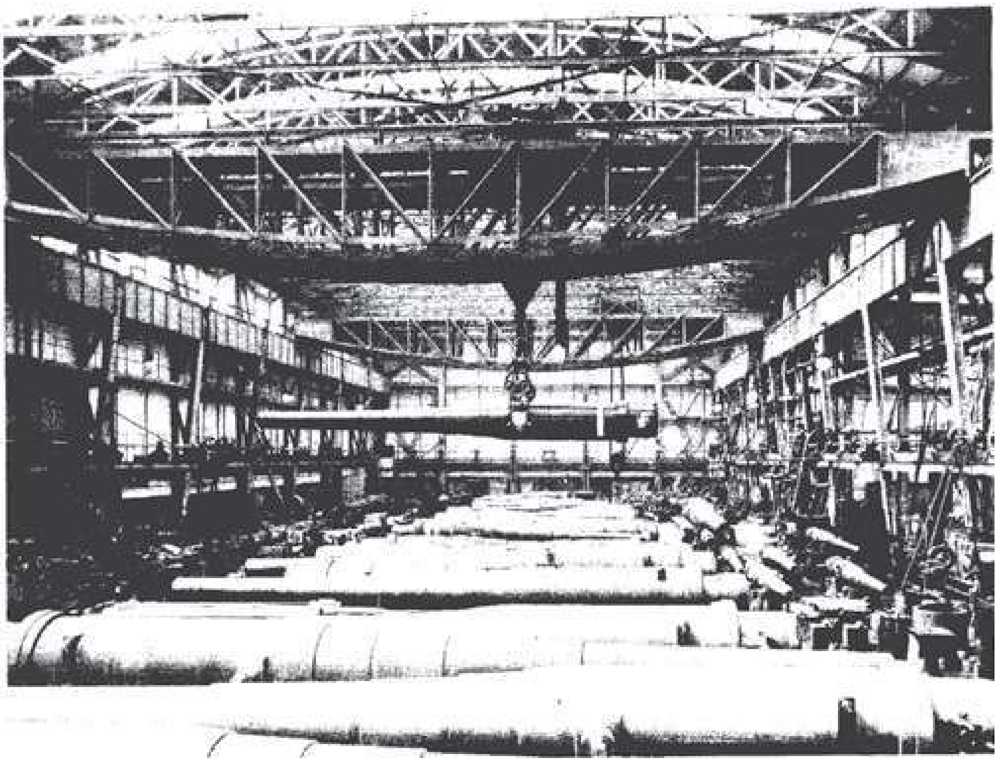
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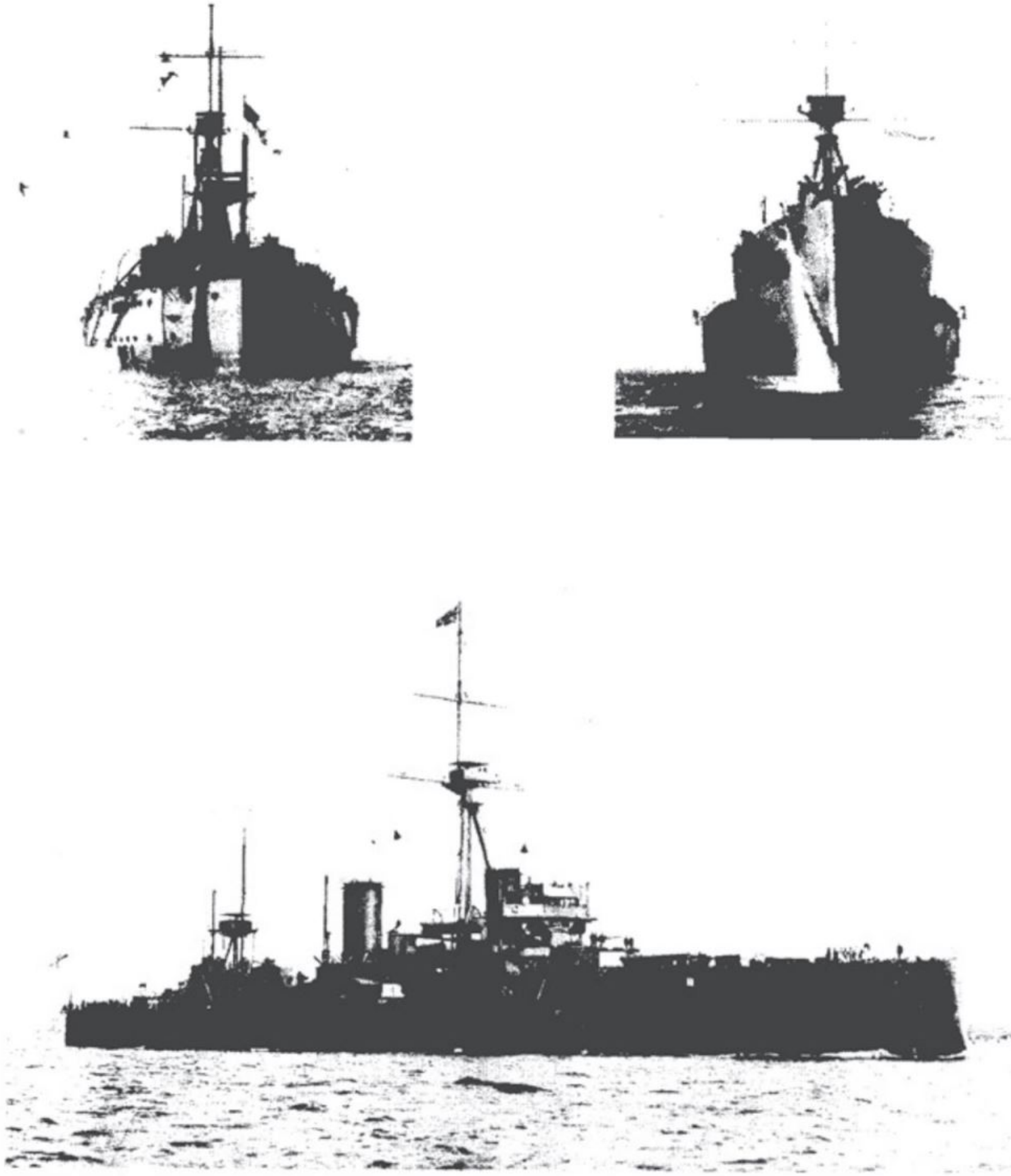
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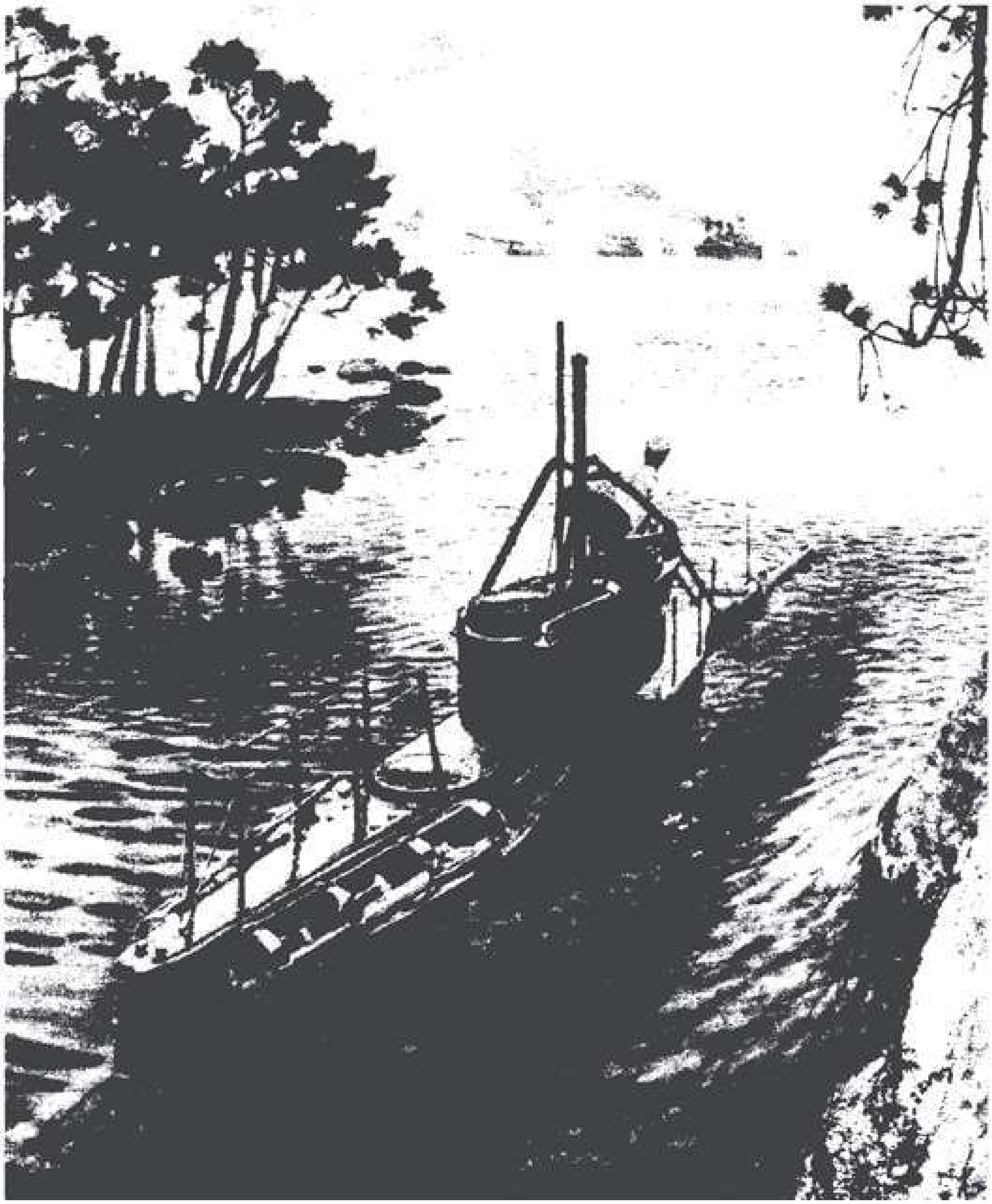
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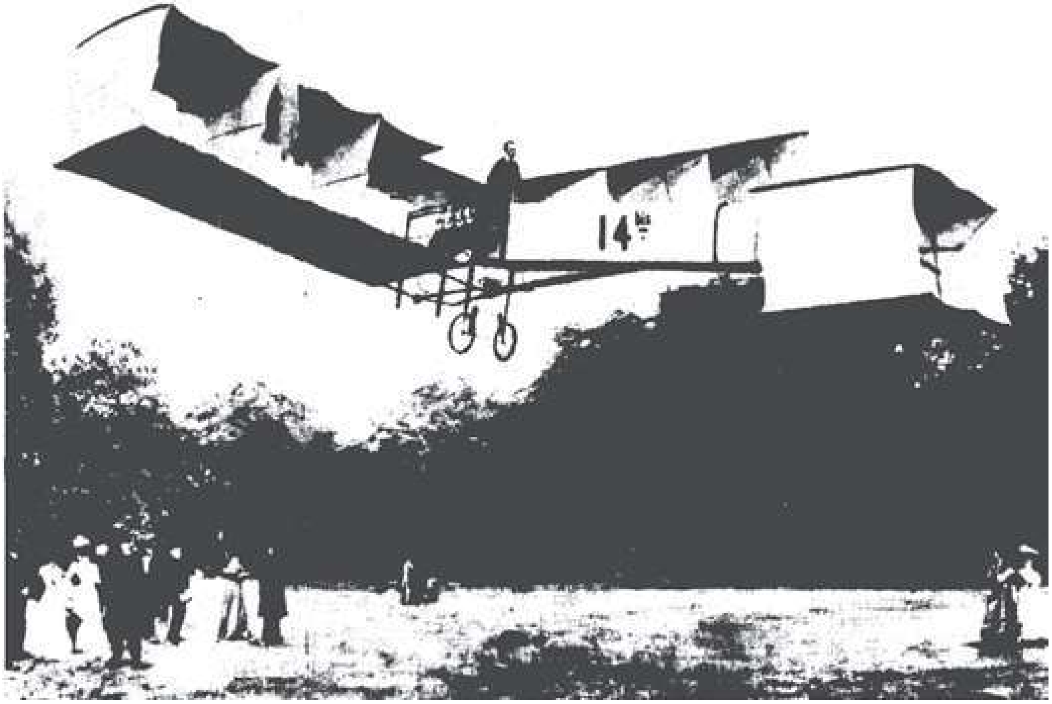


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1889	16.0	13.0
1894	17.9	15.5
1899	20.0	24.1
1904	36.7	35.5
1909	26.8	32.3
1914	28.3	48.8

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[illegible]1914[illegible]19[illegible]80[illegible]20[illegible]——[illegible]——[illegible]

[illegible]

1884[illegible]

[illegible][53][illegible]

[illegible]

[illegible]A. J. H.[illegible]1906[illegible]10[illegible]10[illegible]4[illegible]1911[illegible][54][illegible]1913[illegible]·[illegible]

[illegible]……[illegible][55]

[illegible]“[illegible]” [illegible]1913[illegible]10[illegible][56]

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[illegible][57][illegible]“[illegible]” [illegible]1912[illegible]

[illegible]……[illegible][58]

[illegible]1905—1910[illegible][59][illegible]

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[illegible]1906[illegible][68]

[illegible]1890—1891[illegible]86.4%[illegible]13.6%[illegible][69][illegible]1914[illegible]

[illegible] 1/3[illegible][70]

[illegible]1903[illegible]1904[illegible][71][illegible]-[illegible]“[illegible]” [72][illegible]20[illegible]1895—1904[illegible]660[illegible]1905—1913[illegible]1 280[illegible][73][illegible]1898[illegible]1914[illegible]

[illegible]1902[illegible]1898[illegible][74][illegible]1901[illegible]“[illegible]” [illegible][75][illegible]“[illegible]” [illegible]1904[illegible]——[illegible]——[illegible]1904—1905[illegible]

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[illegible]20[illegible]10[illegible]1912[illegible]·[illegible]·[illegible]-[illegible]Theobald von Bethman-Hollweg[illegible][79]

[illegible]1905—1906[illegible]1893[illegible]1871[illegible]1891—1894[illegible]·[illegible]·[illegible]Alfred von Schlieffen[illegible]1891—1905[illegible]

[illegible]1893[illegible]1914[illegible]1893[illegible]1904[illegible]1907[illegible]——[illegible]——[illegible][80]

[illegible]1893—1914[illegible]1866[illegible]1870—1871[illegible][81][illegible]

[illegible]1914[illegible]8[illegible]

[1] [illegible]1884—1914[illegible]12[illegible]84[illegible]30[illegible]1882[illegible]8[illegible]“[illegible]” [illegible]Rurik[illegible] David Dougan, *The Great Gunmaker: The Story of Lord Armstrong* (Newcastle-on-Tyne,n.d.), pp. 138–44; Donald W. Mitchell, A *History of Russian and Soviet Sea Power* (New York, 1974), p. 193[illegible]

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[27] □□□□□1905□□3 680□□□□□□1908□□3 110□□□□□□□B.R. Mitchell, *British Historical Statistics* (Cambridge, 1971), pp. 397–98□

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年份	鱼雷射程（单位：码）
1866	220
1876	600
1905	2 190
1906	6 560
1913	18 590

□□□□□Gray, *The Devil’s Device*□Appendix□

[41] □□1884—1914□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□Ernest H. Jenkins, *A History of the French Navy* (London,1973), pp. 303 ff.; Bueb, *Die “Junge Schule” der franzbsischen Marine;*Joannes Tramond and André Reussner, *Elements d’histoire maritime et coloniale contemporaine, 1815–1914,* new ed. (Paris, 1947), pp. 652 ff.; Salaun, *La marine française,* pp. 1-75□

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1914[illegible]8[illegible]4[illegible]

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[illegible][8][illegible]20[illegible]10[illegible]1905—1906[illegible]

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[illegible]1050[illegible]“[illegible]” [illegible][15][illegible]1918—1919[illegible]

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[illegible]1850[illegible]1850—1864[illegible][19][illegible]·[illegible]1869—1948[illegible]20[illegible]20[illegible]1893—1976[illegible]1927[illegible][20][illegible]

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[illegible]1793[illegible][29]

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[illegible]1914[illegible][32][illegible]

[illegible]·[illegible]Albert Thomas[illegible][33]

[illegible]1915[illegible]1917[illegible]Allied Maritime Transport Council[illegible]

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[illegible]·[illegible]10[illegible]1916[illegible]7[illegible][44][illegible]

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[illegible]1917[illegible]

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[illegible]——[illegible]——[illegible]

[illegible]“[illegible]” [illegible][46]

[illegible]1915[illegible]45[illegible]1916[illegible]9[illegible]450[illegible][47][illegible]1916[illegible]1916[illegible]1—12[illegible]

[illegible]1917[illegible]15%[illegible]1913[illegible]25%[illegible]1917[illegible][48][illegible][49]

[illegible]1916[illegible]1914—1915[illegible]1916[illegible]1916[illegible]8[illegible]

[illegible]

[illegible]1916—1918[illegible]

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[illegible]20[illegible]

[illegible]1914[illegible]

[illegible]Bureau of Naval Design[illegible]“[illegible]” [illegible]land cruiser[illegible]“[illegible]” [illegible]

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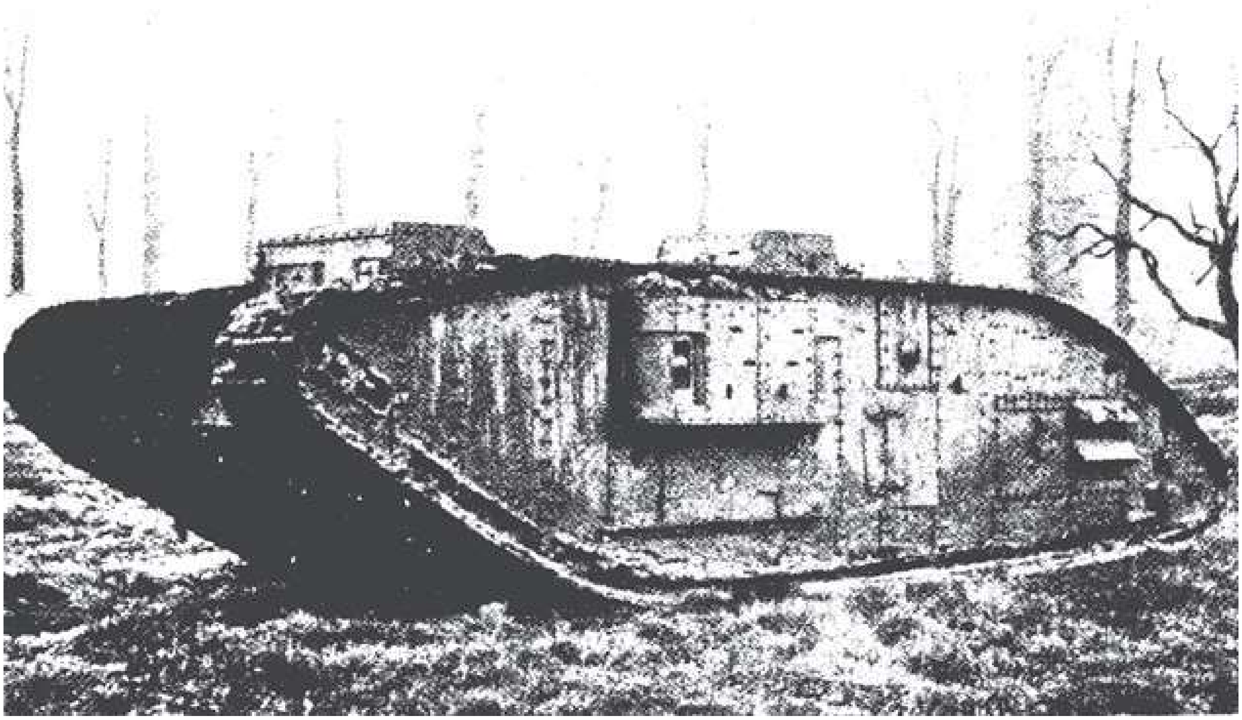
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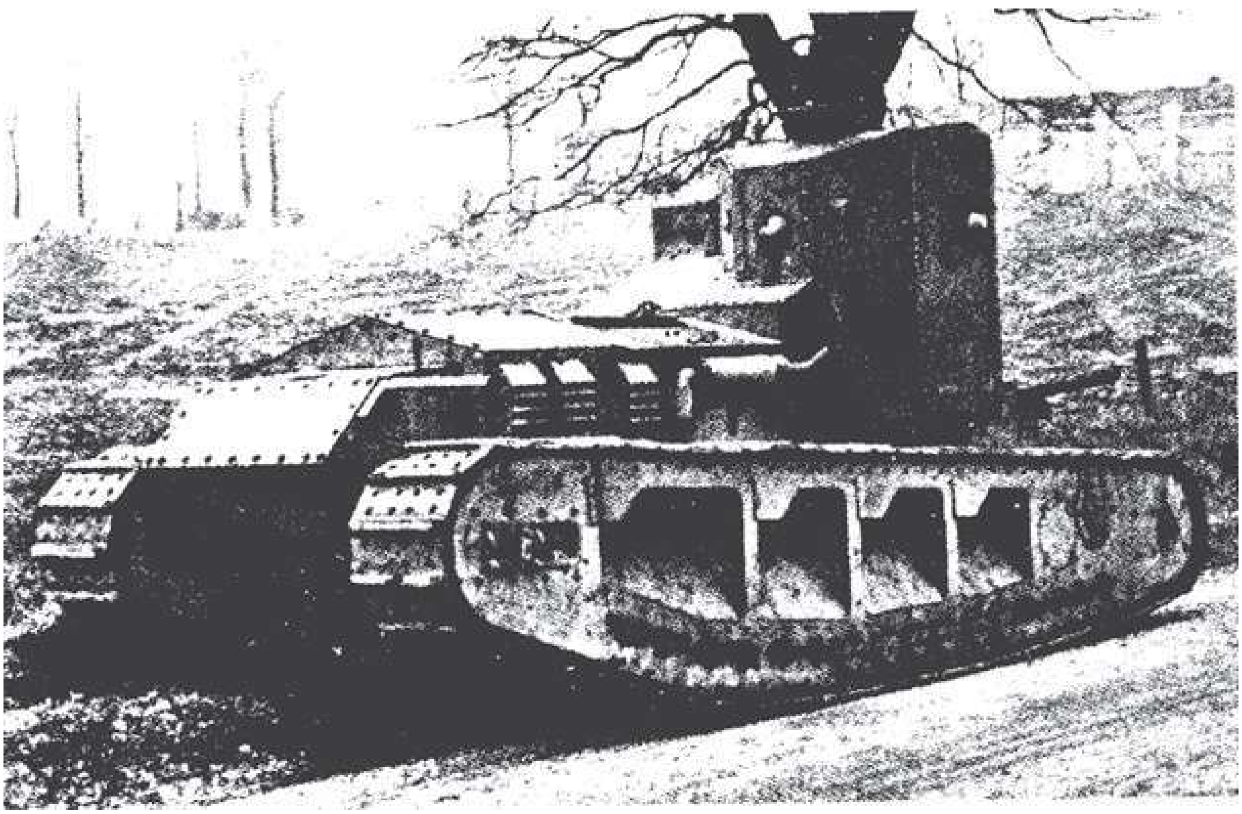


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[illegible]——[illegible][52]

[illegible]1914[illegible][53][illegible][54][illegible]——[illegible]“[illegible]” [illegible]——[illegible]1917[illegible]

[illegible]1915[illegible]1918[illegible][55][illegible]——[illegible]“[illegible]” [illegible]

[illegible]1916[illegible]——[illegible]——[illegible]

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[illegible]20[illegible][56][illegible]

[illegible]1916[illegible][57][illegible]1918[illegible][58]

[illegible]1918[illegible]1918[illegible]10[illegible]14 315[illegible][59][illegible]

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[illegible]1916[illegible]8[illegible]1917[illegible]

[illegible]·[illegible]Etienne Clémentel[illegible][60]

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[illegible]1916[illegible]750[illegible]20[illegible]30[illegible]1918[illegible]40%[illegible]1/3[illegible][62]

[illegible][63][illegible]18[illegible][64]

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[illegible]1917[illegible]4[illegible]6[illegible][65]

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[illegible]1917—1918[illegible]

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[illegible]——[illegible]——[illegible]19[illegible]80[illegible]

[illegible]1917[illegible]1918[illegible]“[illegible]” [illegible]20[illegible]

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[illegible]1923[illegible]“[illegible]”[illegible][66][illegible]20[illegible]20[illegible]

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[illegible]20[illegible]30[illegible]1928—1932[illegible][67][illegible]1932—1937[illegible][68]

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[illegible][69][illegible]1930—1942[illegible]5[illegible][70][illegible]

[illegible]1937[illegible]1939[illegible]1938[illegible]1939[illegible]“[illegible]” [illegible][71]

[illegible]1930—1941[illegible]“[illegible]” [illegible]1853[illegible]1922[illegible]Washington Naval Treaties[illegible][72]

[illegible]1931[illegible][73][illegible][74][illegible]“[illegible]” [illegible]“[illegible]” [illegible]“[illegible]” [illegible]

[illegible]20[illegible]30[illegible]1933—1945[illegible]1935[illegible]1942—1945[illegible]“[illegible]”[illegible]1866[illegible]1870[illegible]1914—1918[illegible][75]

[illegible]1932[illegible]·[illegible]1933[illegible]·D. [illegible]“[illegible]”[illegible]“[illegible]”[illegible]“[illegible]”[illegible]1929[illegible]1300[illegible][76][illegible]

[illegible]1935[illegible]1939[illegible]

[illegible]——[illegible]“[illegible]”[illegible]——[illegible]“[illegible]”[illegible]1940—1941[illegible][77][illegible]1940[illegible]1940[illegible]

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[illegible]1916—1918[illegible]1939[illegible]“[illegible]”[illegible]“[illegible]”[illegible]1914—1918[illegible]“[illegible]”[illegible]1940[illegible]5[illegible]

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[illegible]1941[illegible]12[illegible]5[illegible]1914[illegible]1942[illegible]1944[illegible]750[illegible]1/5[illegible]“[illegible]”[illegible][82][illegible]1944[illegible]7[illegible]1945[illegible]5[illegible][83]

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[illegible]1943[illegible]11[illegible][89]

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[illegible]“[illegible]” [illegible]10[illegible]

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[illegible]20[illegible]30[illegible][94]

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[illegible]——“[illegible]” [illegible]——[illegible]20[illegible]

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[illegible]9-1 1880—1950[illegible]

年份	总人口数（百万人）	增加值（百万人）	增长百分比（%）
1880	36.4	——	——
1890	40.5	4.1	11
1900	44.8	4.3	11
1910	50.9	6.1	14
1920	55.9	5.0	10
1930	64.4	8.5	15
1940	73.1	8.7	13.5
1950	83.2	10.1	14

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[49] □□□□□□□□□□□□□

□9-2 □□□□

年份	粮食产量（百万普特）
1914	4 309
1915	4 659
1916	3 916
1917	3 809

□9-3 □□□□□□□

年份	俄国物价水平（1914 年 =100）
1914 年 6 月	100
1915 年 6 月	115
1916 年 6 月	141
1916 年 12 月	398
1917 年 6 月	702
1917 年 12 月	1 172

9-4 □□□□□□

年份	工业生产指数（1913 年 =100）
1913	100
1914	101.2
1915	113.7
1916	121.5
1917	77.3

□9-5 □□□□□□□□

年份	输送到城镇的粮食（百万普特）
1913—1914	390
1915—1916	330
1916—1917	295

1□□=56□□□□□36□□□□□——□□□□□□□□□□Stone, *The Eastern Front*, pp. 209, 287, 295□

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□9-6 1941—1944□□□□□□□□□□□□□□□□□□1940□□100□

	1941 年	1942 年	1943 年	1944 年
工业生产总值	98	77	90	104
军工占比	140	186	224	251
农业生产总值	62	38	37	54

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1945[illegible]

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[illegible]——[illegible]1948—1953[illegible]1950[illegible]

[illegible]“[illegible]” [illegible]1949[illegible]“[illegible]” [illegible]“[illegible]” [illegible]1945—1949[illegible]1950—1953[illegible]1946—1954[illegible]1955—1975[illegible]

[illegible]

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[illegible]1945[illegible]“[illegible]” [illegible]——[illegible]——[illegible]——[illegible]——[illegible]“[illegible]” （temporary political[illegible][1] [illegible]1941[illegible]Motherland of Socialism[illegible]1945[illegible]

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[illegible]1962[illegible]10[illegible][6]

[illegible]20[illegible]60[illegible]1957[illegible]10[illegible]

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[illegible]70[illegible]25[illegible]“[illegible]”[illegible]

[illegible]1960[illegible]

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[illegible]20[illegible]60[illegible]ICBM[illegible][11][illegible]10-1[illegible]

[illegible]10-1 [illegible]

	1970 年	1980 年
远程轰炸机	——	——
美国	512 架	348 架
苏联	156 架	156 架
潜艇导弹发射装置	——	——
美国	656 艘	576 艘
苏联	248 艘	950 艘
洲际弹道导弹	——	——
美国	1 054 枚	1 052 枚
苏联	1 487 枚	1 398 枚
核弹头总数	——	——
美国	4 000 枚	9 200 枚
苏联	1 800 枚	6 000 枚

[illegible]Stockholm International Peace Research Institute, *Yearbook 1981*, table 2:1, p. 21[illegible]

[illegible]20[illegible]70[illegible]1972[illegible]SALT[illegible]20[illegible]70[illegible]1981[illegible]

[illegible]20[illegible]80[illegible]“[illegible]” [illegible]20[illegible]60[illegible]

[illegible]“[illegible]” [illegible][12][illegible]“[illegible]” [illegible]

[illegible]10-2[illegible]“[illegible]” [illegible]20[illegible]70[illegible]

[illegible]10-2 [illegible]
[illegible]10[illegible]1978[illegible]

	1950 年	1955 年	1960 年	1965 年	1970 年	1975 年	1980 年
美国	39.5	98.2	100.0	107.2	130.9	101.2	111.2
北约合计	67.3	142.6	150.3	168.1	194.0	184.9	193.9
苏联	37.3	51.2	48.0	65.9	92.5	99.8	107.3
华约合计	40.7	54.2	51.3	71.3	100.8	110.3	119.5
不承担义务国家	25.7	29.6	34.6	57.9	85.7	123.7	141.9
世界合计	133.7	226.4	236.2	297.3	380.5	418.9	455.3

[illegible]Stockholm International Peace Research Institute, *Yearbook 1981*, Appendix 6A, p. 156[illegible]

[illegible]1947[illegible]

[illegible]20[illegible]60[illegible]1966[illegible]

[illegible]——[illegible]6[illegible][13][illegible][14]

[illegible][15][illegible]1950—1953[illegible]1964—1973[illegible]1956[illegible]1968[illegible]1979[illegible]1982[illegible]——[illegible]

[illegible]

[illegible]—[illegible]—[illegible]—[illegible]20[illegible]60[illegible]

[illegible]“[illegible]” [illegible]

[illegible]

[illegible]19[illegible]80[illegible]

[illegible]

[illegible]20[illegible]60[illegible][16]

[illegible]20[illegible]60—70[illegible]

[illegible] 20[illegible]60[illegible] 1956[illegible] 20[illegible]60[illegible] [17] [illegible]

[illegible] 1946[illegible] 1961[illegible]

[illegible]——[illegible]——[illegible]——[illegible]

[illegible]

[illegible]——[illegible]——[illegible]

[illegible]

[illegible]20[illegible]18[illegible]19[illegible]

[illegible]20[illegible]

[illegible]“[illegible]” [illegible]1750—1950[illegible]

[illegible]20[illegible]60[illegible]19[illegible]1945[illegible][18]

[illegible]20[illegible]60[illegible][19][illegible]

[illegible] 19 [illegible] 20 [illegible]

[illegible]

[illegible] — [illegible]

[illegible] [20]

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[illegible]——[illegible]——[illegible]

[illegible]

[illegible]

[illegible]1957[illegible]

[illegible]20[illegible]

[illegible]

[1] 1947[illegible]4[illegible]9[illegible]·[illegible]1947[illegible]5[illegible]4[illegible]Historicus, “Stalin on Revolution,” *Foreign Affair* 27 (1949) : 175 ff[illegible]

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[11] [illegible]1866[illegible]220[illegible]1905[illegible]2 190[illegible]40[illegible]1913[illegible]18 590[illegible]6[illegible]Polaris[illegible]1959[illegible]1 200[illegible]2 500[illegible]5[illegible]Edwin A. Gray, *The Devil's Device* (London, 1975)[illegible]SIPRI *Yearbook, 1908–69* (London, 1969), p. 98[illegible]

[12] [illegible]

[13] 1945□7□16□□1979□12□31□□□□□□□□□□□□□□□□667□□□□447□□□□97□□□□□33□□□□26□□□□1□□SIPRI *Yearbook 1981,* App. 11B, p. 382.

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[20] □□□□□□□□□□□□□□□□□□□□Jacques van Doom, ed., *Military Profession and Military Regimes: Commitments and Conflicts* (The Hague, 1969)□

[illegible]

[illegible]

[illegible] 1 000 [illegible] 1 000 [illegible] 20 [illegible]

[illegible] — [illegible]

[illegible]

[illegible]1000—2000[illegible]

[illegible]1000[illegible]——[illegible]

[illegible]

[illegible]

[illegible]·[illegible]-[illegible]·[illegible]12[illegible]7[illegible]

[illegible]·[illegible]1000[illegible][1]

[illegible]1996[illegible][2][illegible]

> [illegible]Elizabeth of England was more modest. She never aspired to monopolize the overseas enterprise of her kingdom and chose which voyages to invest in from a mix of pecuniary and political considerations. She was shrewd on both counts, and profited handsomely from her investments.

1996 104

Earlier, sergeants did sometimes become officers, though few ever got beyond the rank of lieutenant. The regulation of 1781 reserving commissions to noblemen therefore rankled, and was still, in 1789, a fresh and remembered grievance.

1781 1789 1996 199

47 “and our dynasty would last for 10 000 generations” 1996 46 “…… ” 1996 126 “ — ” had been caught up with a vengeance in the European military-commercial complex; and the lower classes, along with German city-states 1996 158 “ 18 ” and by the end of the century of millions, of Asians, Africans,and Americans were transformed by the activity of European entrepreneurs 199 “ ” and deprived the Old Regime of its ultimate basis for survival

□□□1996□□□□□□□□□□□□□□□□1996□□□□3□□□□□“fifty-four thousand” □□□“5 400” □□□□“54 000” □□43□□□56□□□□□“Kublai Khan” □“Kublai” □□□“□□□□” □□□□“□□□” □□67□□□□57□□□□“the old rate of 10 percent” □□□“□□□□□□□□” □□□□“□□□10%” □

1996□□□□166□□□□□“But claim and counter claim could be settled only by experimental held maneuvers or by test firings and the like” □□“□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□” □□□□“□□□□□□□□□□□□□□□□□□□□□□□□□□□” □

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> “active hypothesis” is a strange phrase, not normal English. I would guess that it means: hypothesis that will evolve as more knowledge becomes available. I would translate it the same way you would translate“informed hypothesis.”

□□□□□□□□□□“□□□□□□□□□□□□□□□□□□□□□□□□□□□active hypothesis□” □

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[1] [illegible][[illegible]][illegible]·[illegible]2015[illegible]1[illegible]1[illegible]i-ii[illegible]

[2] [illegible]-[illegible]·[illegible]“[illegible]” [illegible]2018[illegible]

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